APPENDIX J

DECISION TREES

MANAGEMENT AND NON-INFRASTRUCTURE DECISION TREES

TECHNICAL SOLUTIONS DECISION TREES

NEW SOURCE DEVELOPMENT DECISION TREES

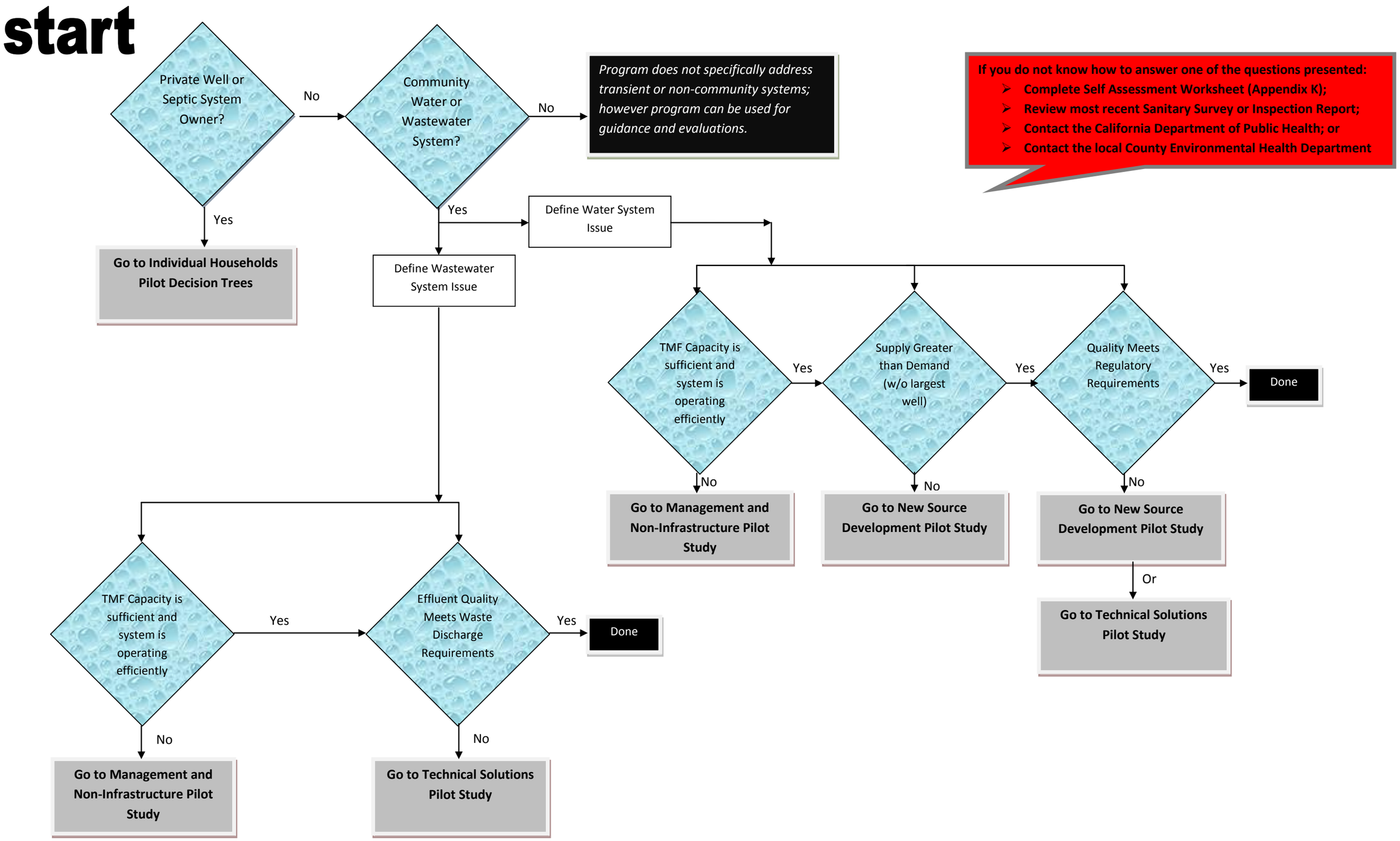
INDIVIDUAL HOUSEHOLDS DECISION TREES

Legend – Symbols (Type of Action)

Flowchart Symbol	Name	Description	Notes
	Process	An operation or action step.	
	Terminator	A start or stop point in a process.	
	Decision	A question or branch in the process.	
	Connector	A jump from one point to another.	For example, a jump from one tree to another.
	Extract (Measurement, Finished Goods)	Extract (split processes) or more commonly – a measurement or finished goods	For example, an offer or acceptance of funds.
	Callout	Used to add comments to a flowchart.	
	Flow Line	Indicates the direction of flow for materials and/or information	

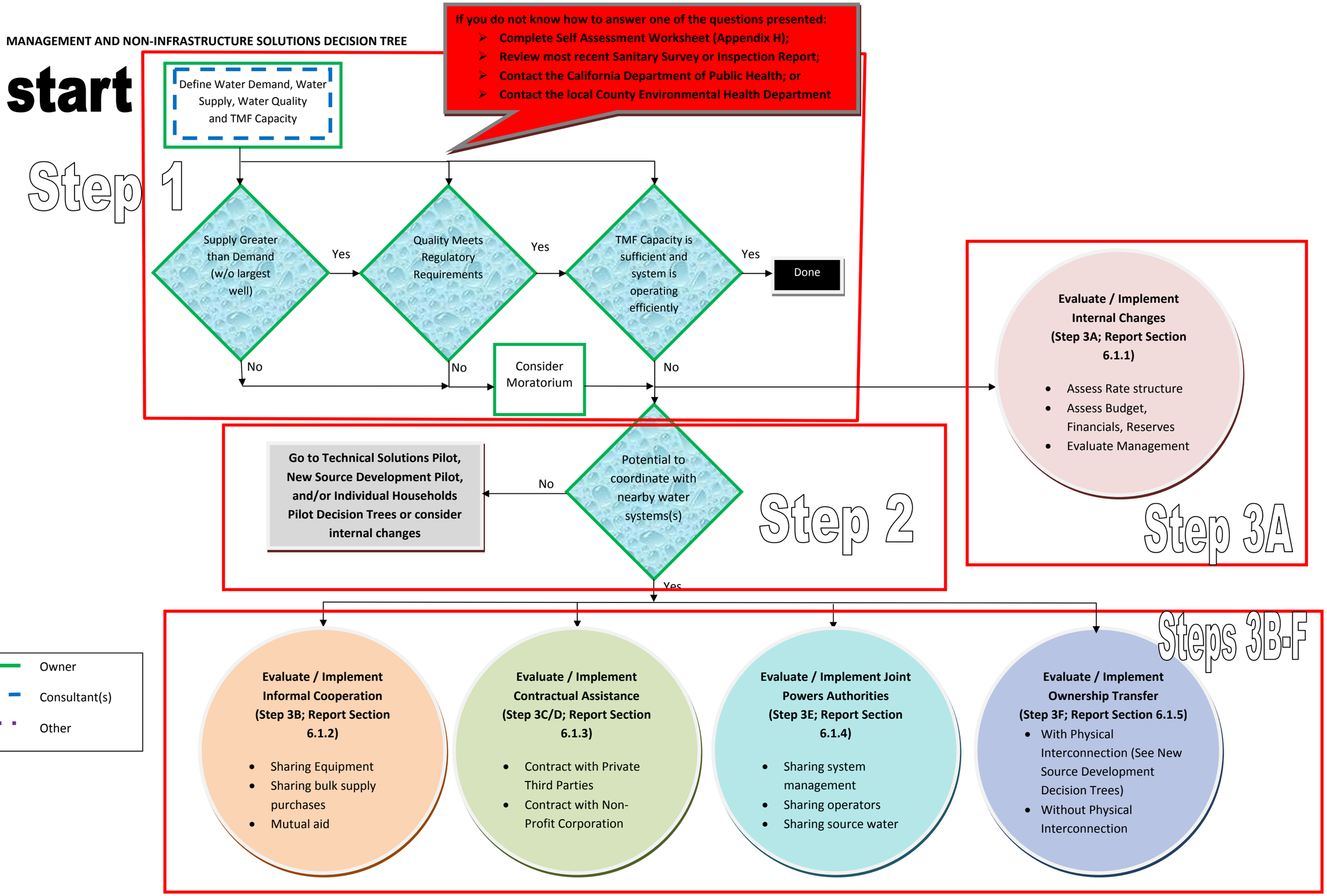
Legend – Line Types (Shape outline by entity making decision or action)

Flowchart Line Type	Name	Description	Notes
	Owner	Community, District, Individual	
	Consultant(s)	Engineers, attorneys, etc.	
	Other	Regulatory agencies, funding agencies, non-profit organizations	

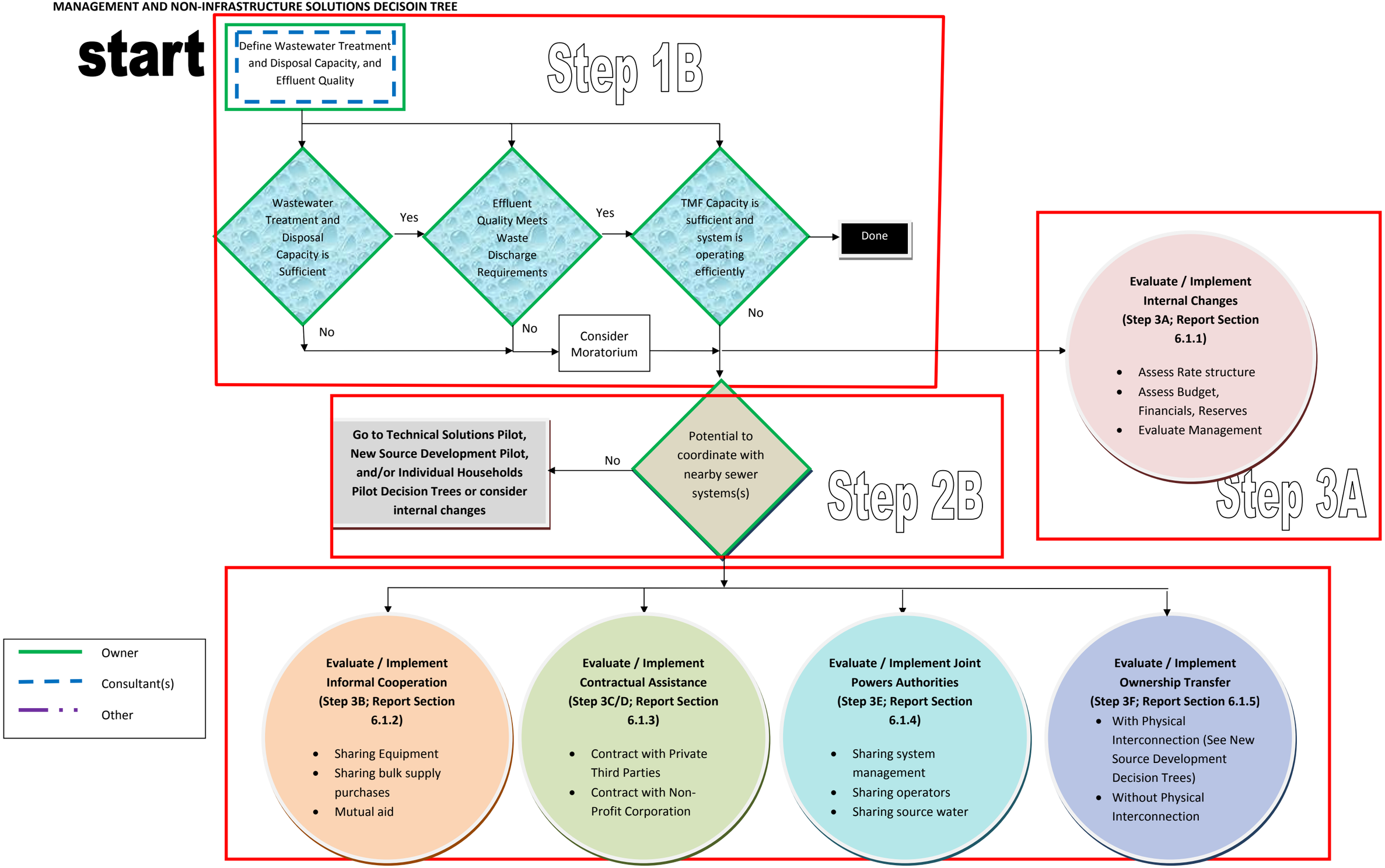

start
Private Well or Septic System Owner?
No
Community Water or Wastewater System?
No
Program does not specifically address transient or non-community systems; however program can be used for guidance and evaluations.
If you do not know how to answer one of the questions presented:
Complete Self Assessment Worksheet (Appendix K);
Review most recent Sanitary Survey or Inspection Report;
Contact the California Department of Public Health; or
Contact the local County Environmental Health Department
Yes
Go to Individual Households Pilot Decision Trees
Yes
Define Water System Issue
Define Wastewater System Issue
TMF Capacity is sufficient and system is operating efficiently
Yes
Supply Greater than Demand (w/o largest well)
Yes
Quality Meets Regulatory Requirements
Yes
Done
No
Go to Management and Non-Infrastructure Pilot Study
No
Go to New Source Development Pilot Study
No
Go to New Source Development Pilot Study
Or
Go to Technical Solutions Pilot Study
TMF Capacity is sufficient and system is operating efficiently
Yes
Effluent Quality Meets Waste Discharge Requirements
Yes
Done
No
Go to Management and Non-Infrastructure Pilot Study
No
Go to Technical Solutions Pilot Study

MANAGEMENT AND NON-INFRASTRUCTURE DECISION TREES

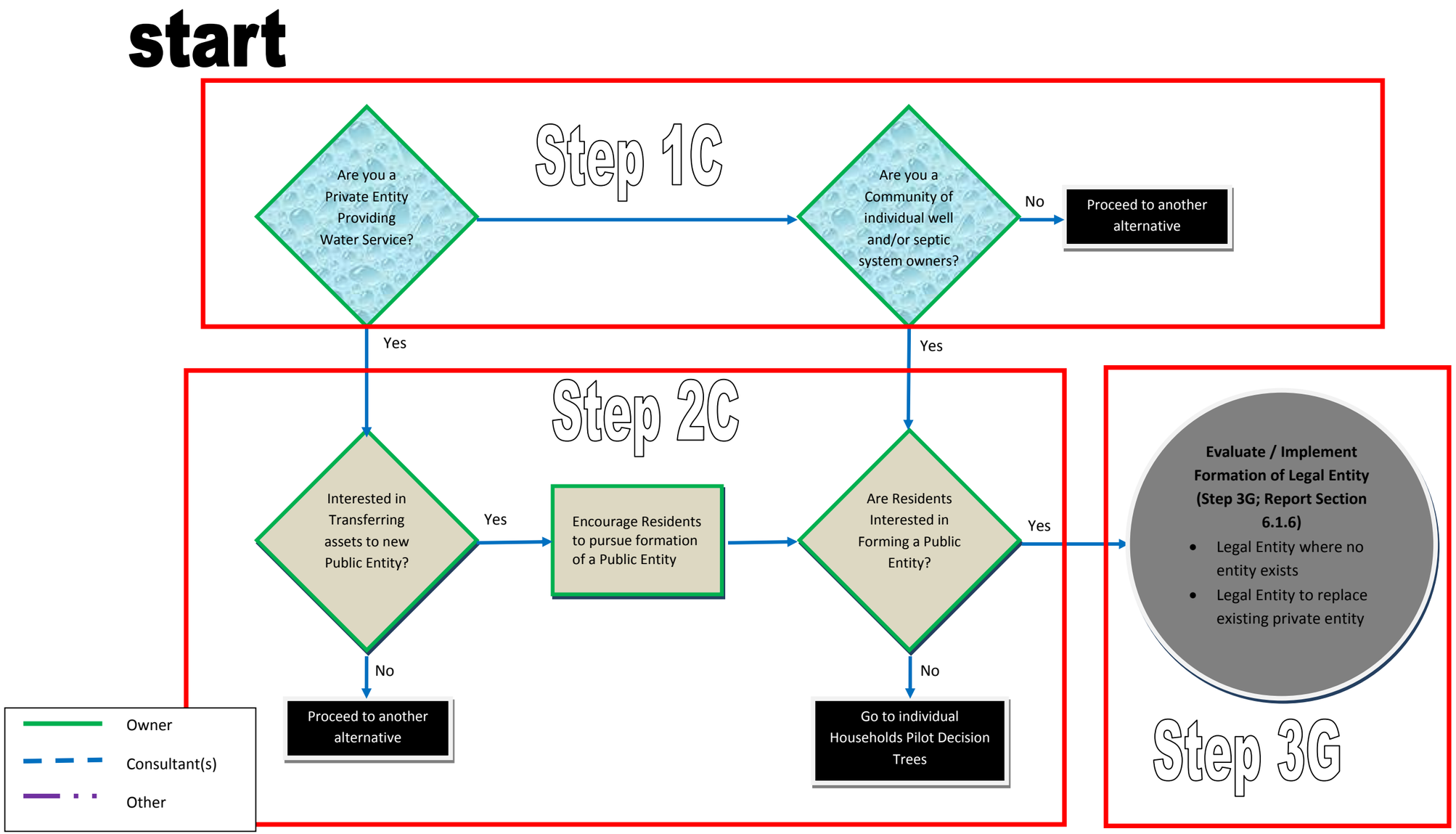
MANAGEMENT AND NON-INFRASTRUCTURE SOLUTIONS DECISION TREE



MANAGEMENT AND NON-INFRASTRUCTURE SOLUTIONS DECISOIN TREE

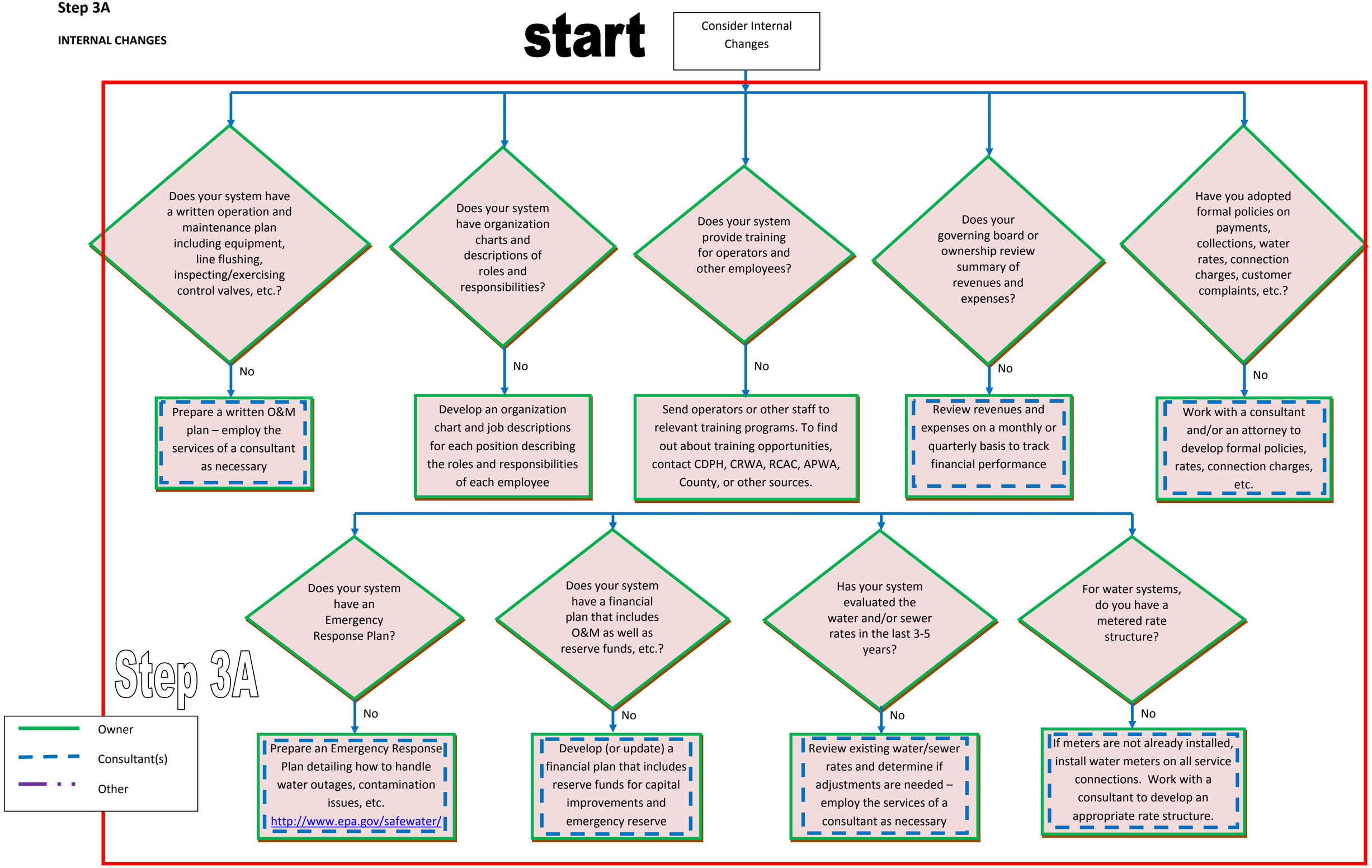


MANAGEMENT AND NON-INFRASTRUCTURE SOLUTIONS DECISION TREE



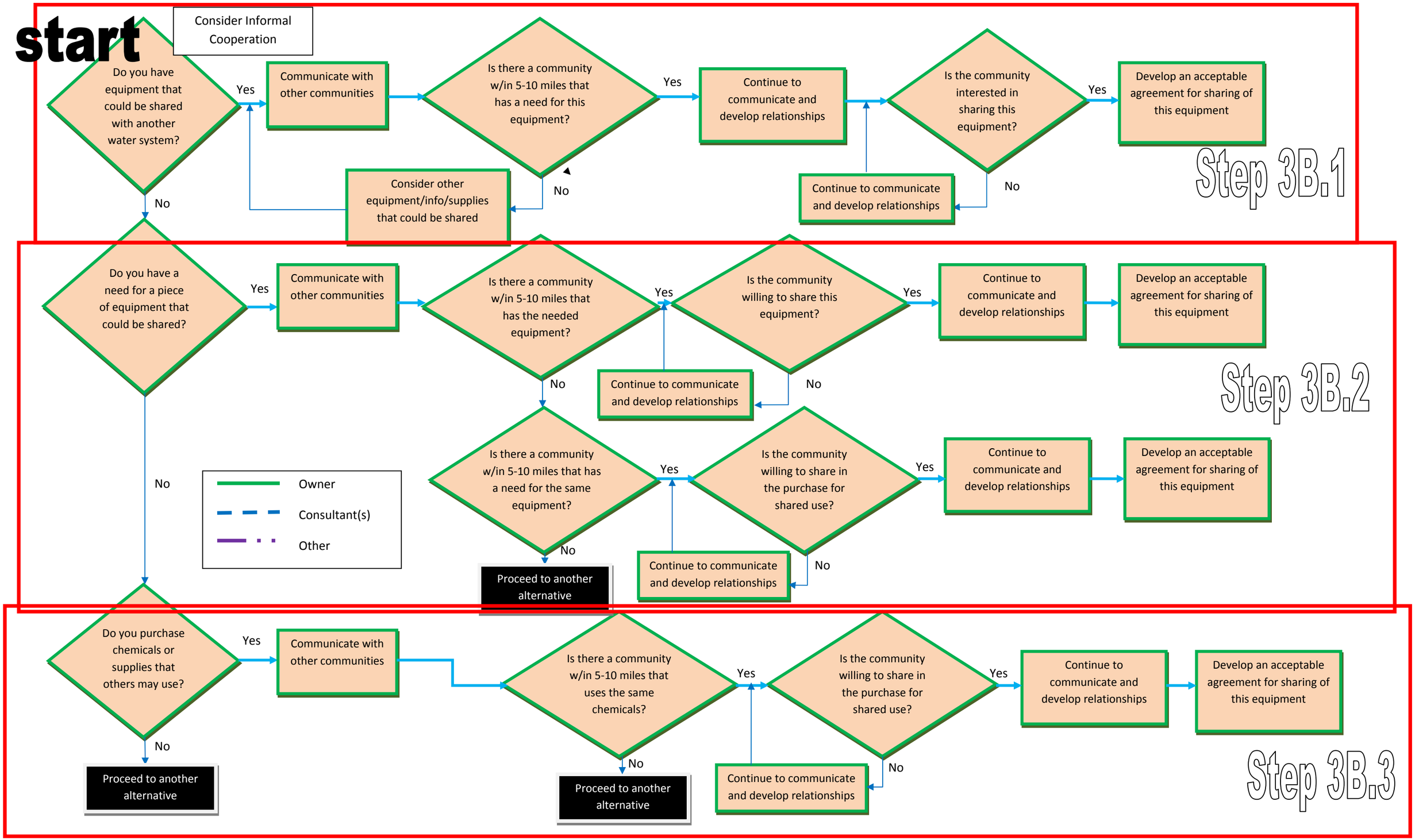
Step 3A

INTERNAL CHANGES



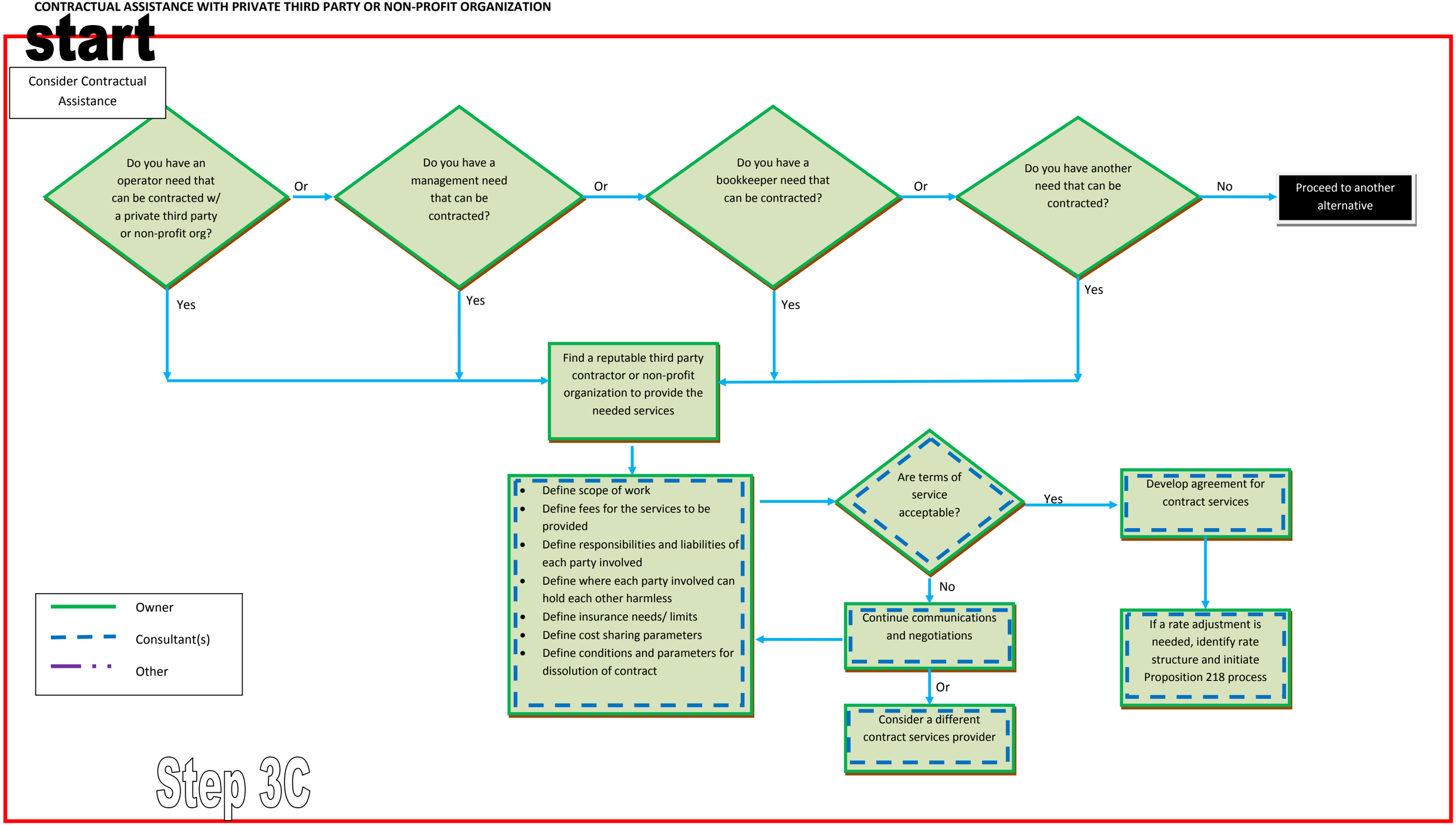
Step 3B

INFORMAL COOPERATION



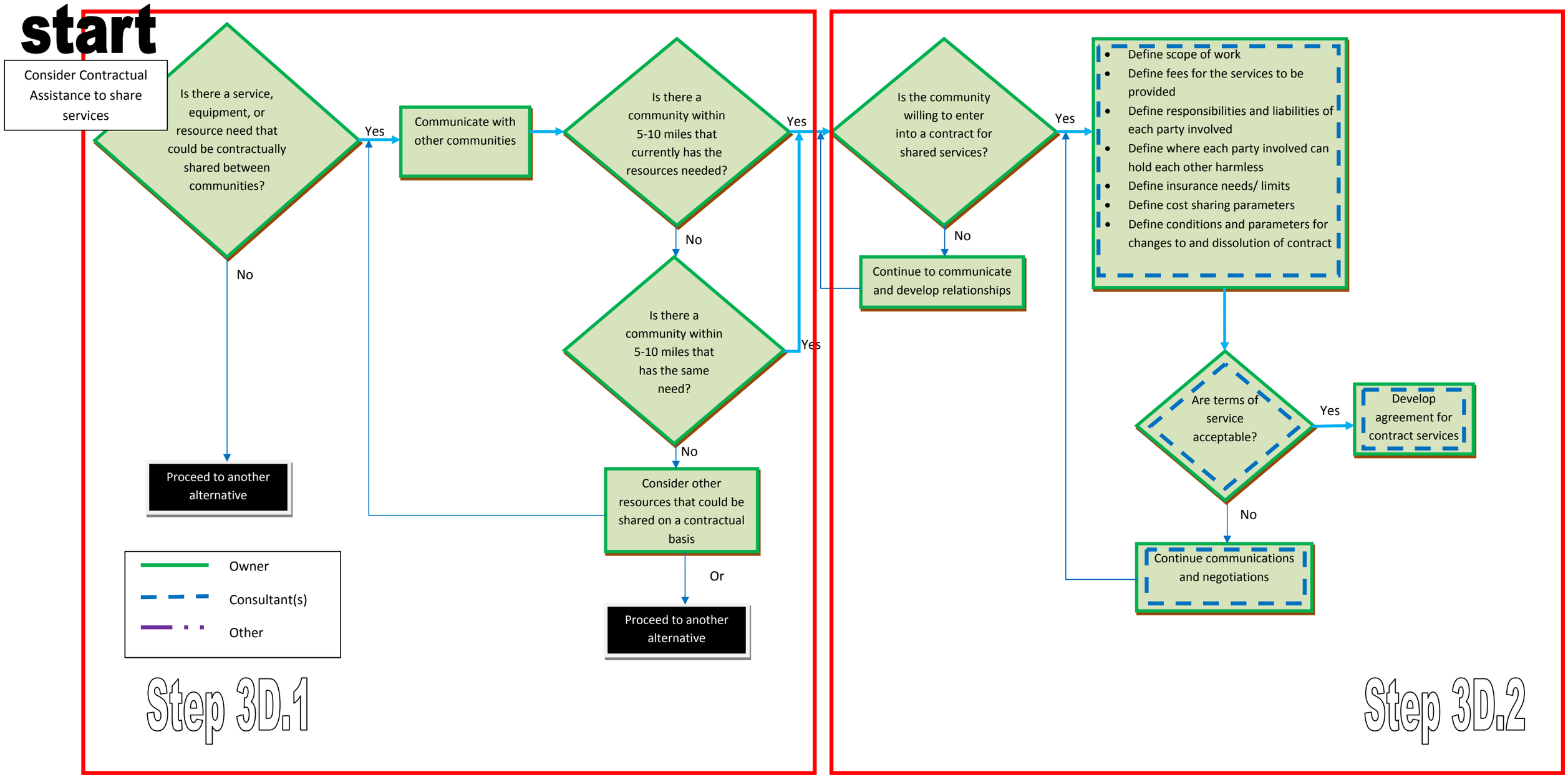
Step 3C

CONTRACTUAL ASSISTANCE WITH PRIVATE THIRD PARTY OR NON-PROFIT ORGANIZATION



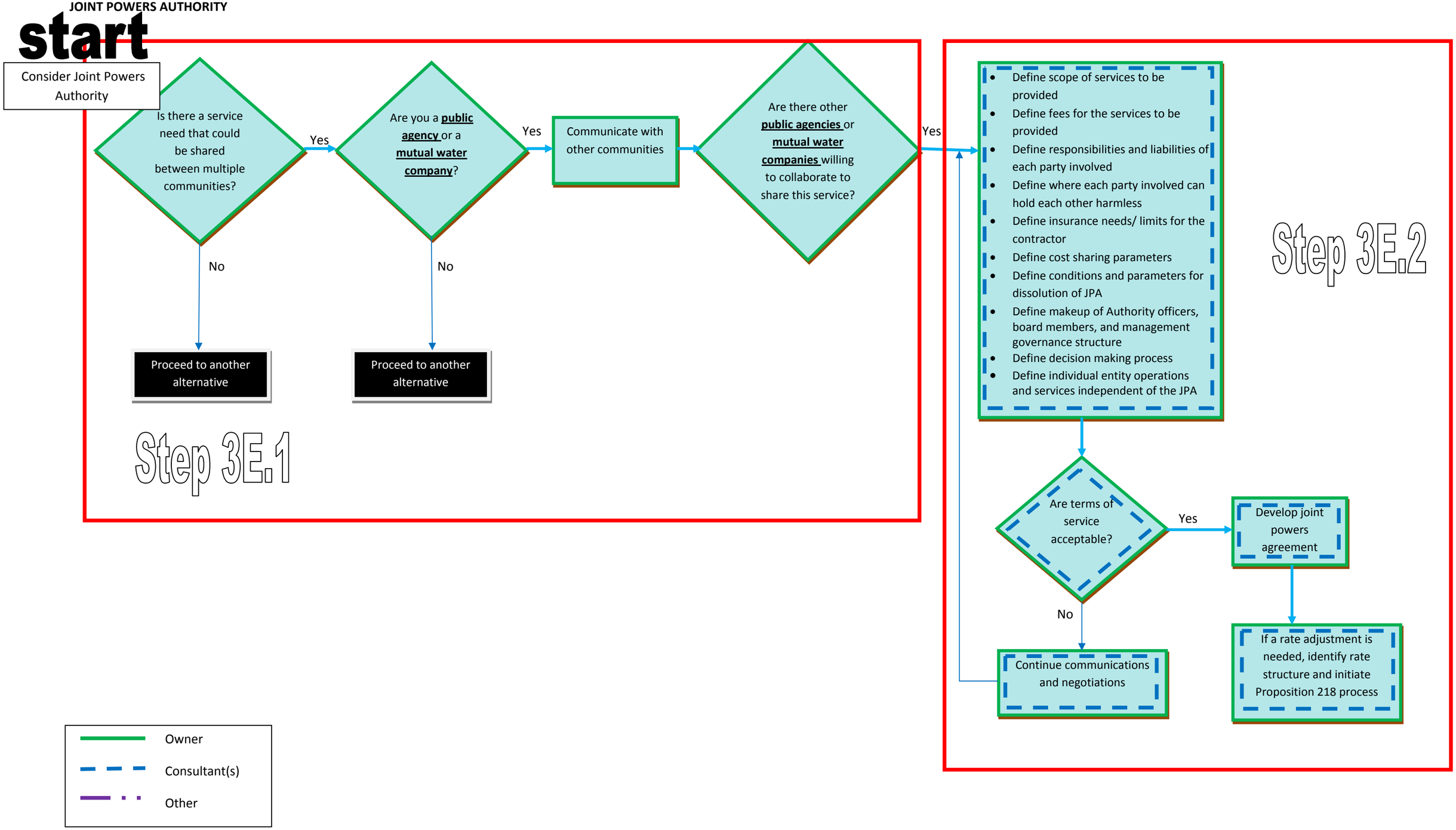
Step 3D

CONTRACTUAL ASSISTANCE TO SHARE SERVICES AND/OR STAFF



Step 3E

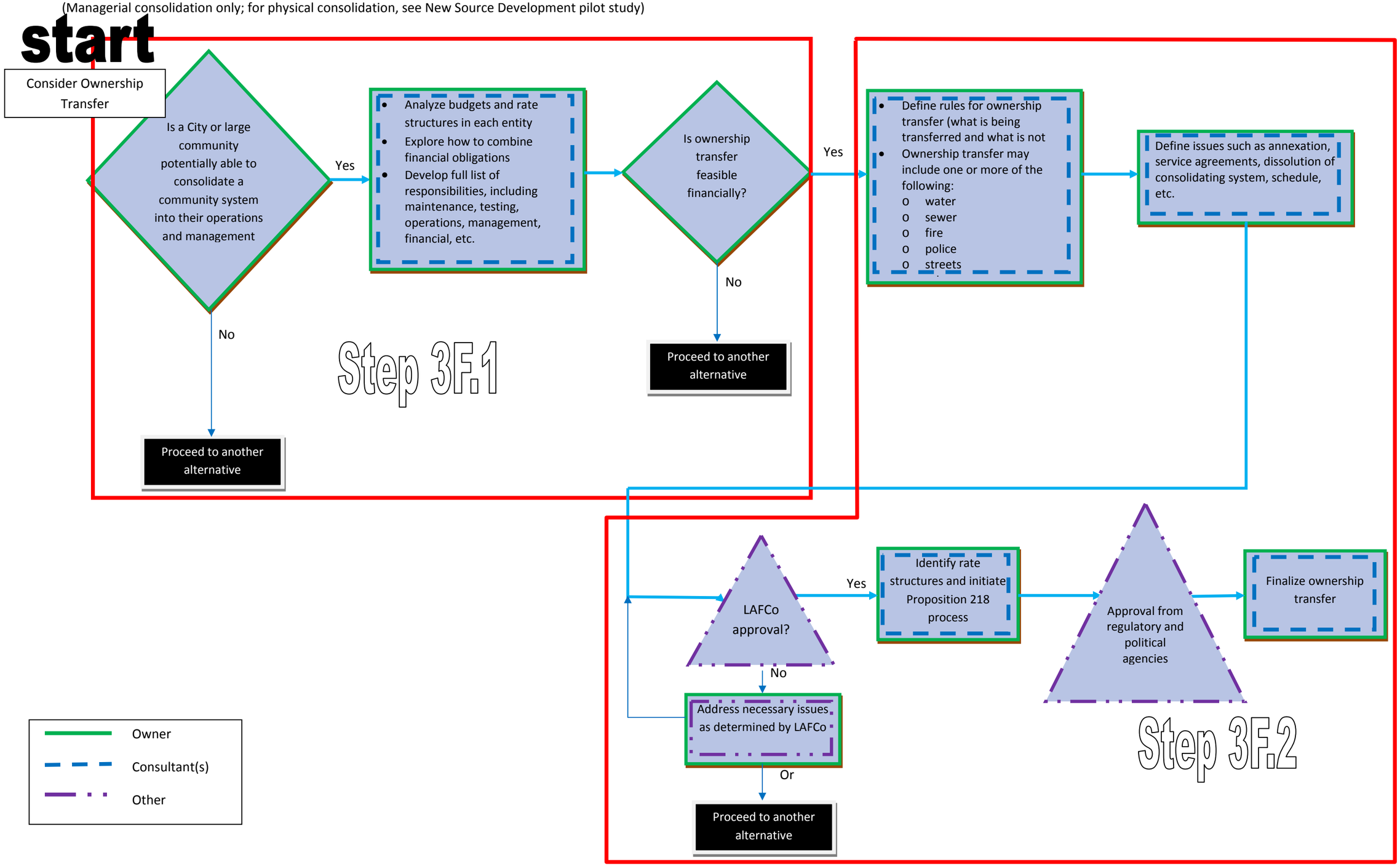
JOINT POWERS AUTHORITY



Step 3F

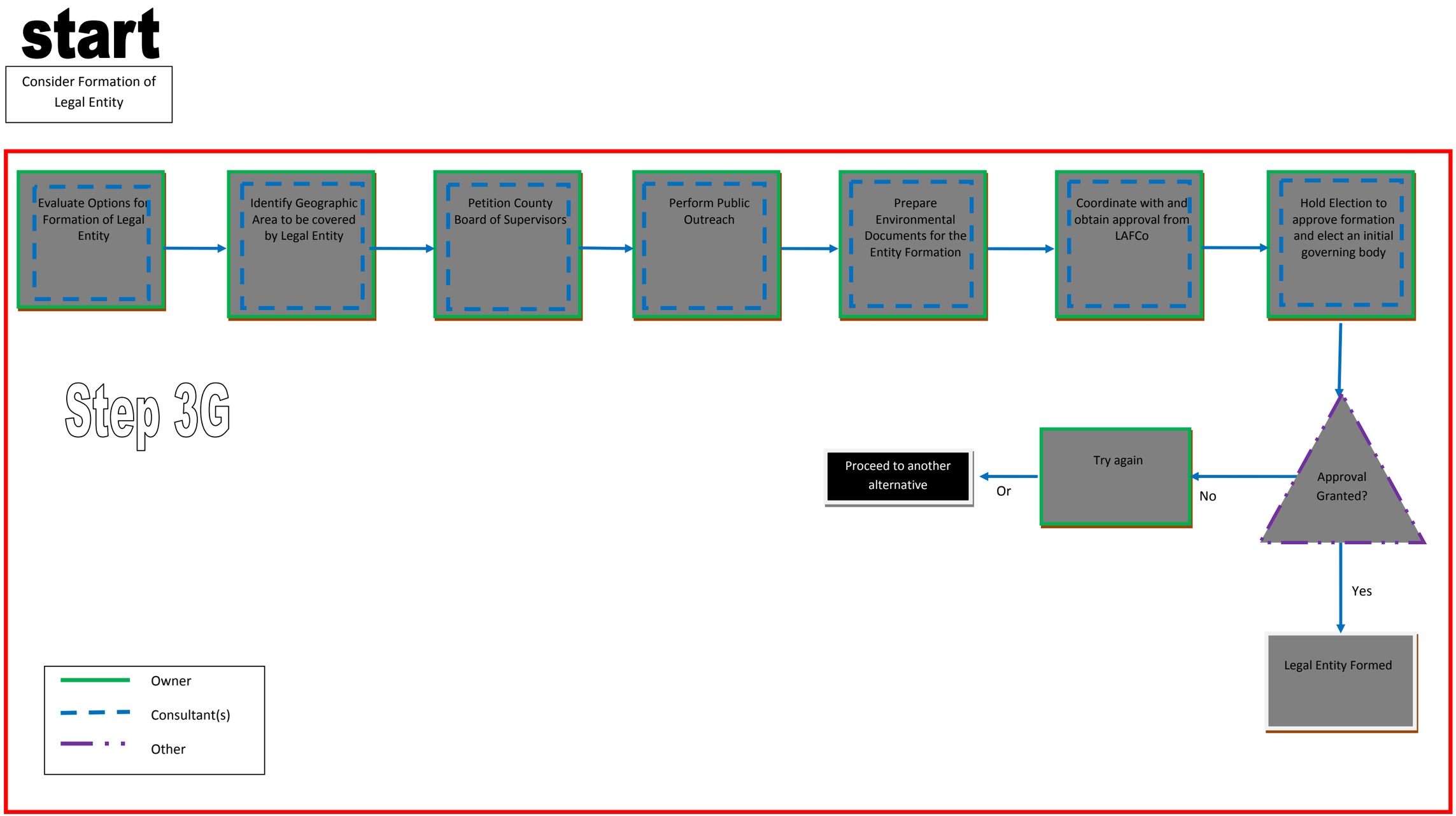
OWNERSHIP TRANSFER

(Managerial consolidation only; for physical consolidation, see New Source Development pilot study)



Step 3G

Formation of Legal Entity



TECHNICAL SOLUTIONS DECISION TREES

Information to be Gathered in Order to Use Decision Trees

Water Systems

The following information can be found in the water system permit, sanitary survey, and previous technical reports or gathered specifically for the community.

1) Any existing water quality concerns?
2) Sources of water
    a. Groundwater (wells)?
    b. Number of wells?
    c. Surface water?
    d. Both?
3) Water Demands
    a. Water production (avg gpd for every month)?
    b. Potable?
    c. Non-potable?
    d. Water meters installed?
    e. Is water demand able to be met year round?
4) Existing Water Treatment
    a. Chlorination?
    b. Other treatment? Provide details.
5) Water Quality
    a. Is the water quality currently meeting all standards?
    b. Is the system under a State/EPA compliance order?
    c. Provide detailed water quality analysis (general mineral, radiological and organics). At least results submitted to CDPH.
6) Infrastructure
    a. Are there leaks in the water distribution system?
    b. Are there other sources of water available?
    c. Is there the possibility of connecting to a neighboring water system?
    d. What are existing water rates?
    e. Is there land available for water treatment?
    f. What is the grade of existing water operator?
    g. Are pump curves and horsepower available for all pumps (including well pumps)?
7) Funding
    a. Has funding been applied for from any agency?

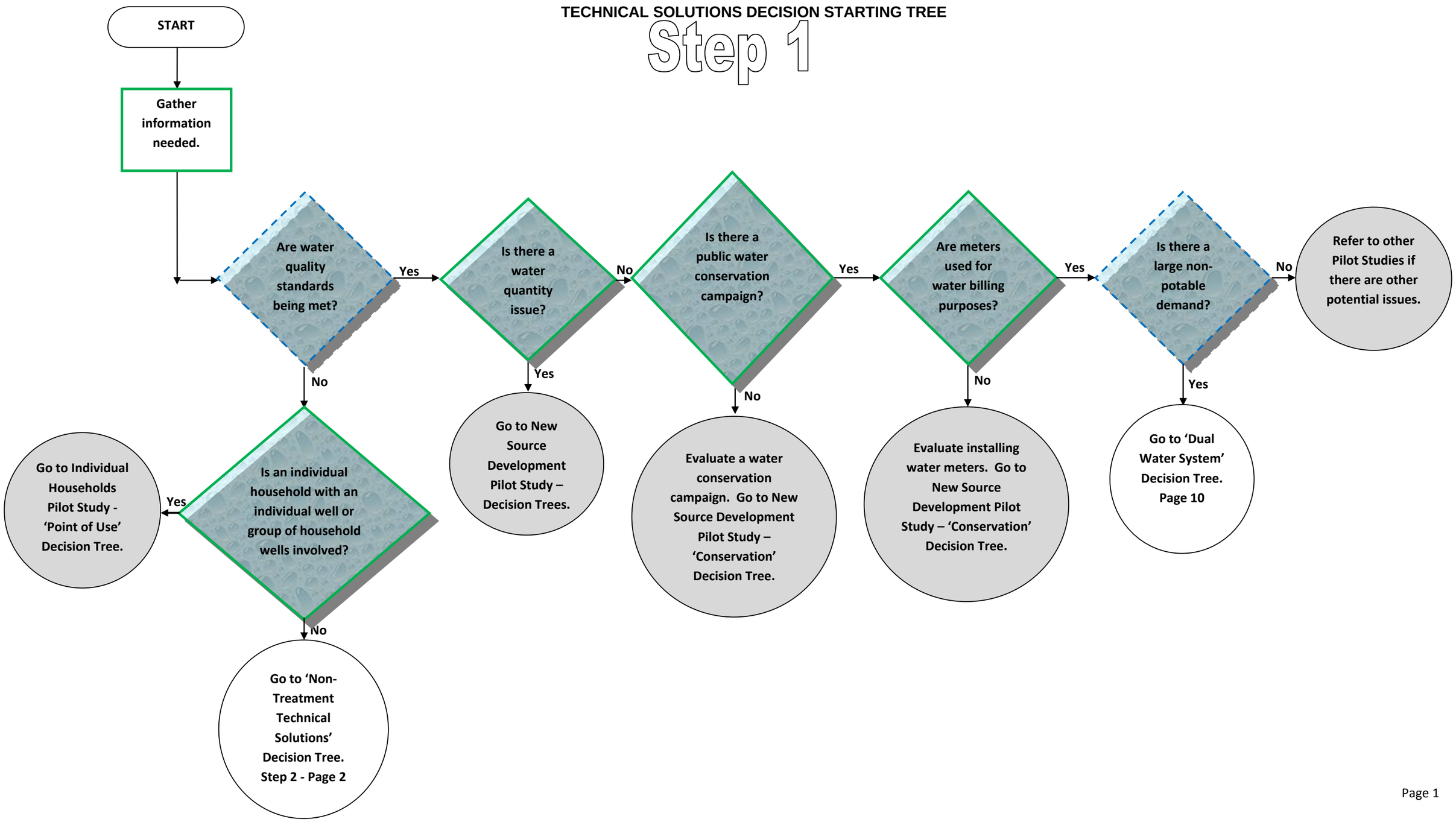
Wastewater Systems

The following information can be found in the waste discharge requirements (WDR), previous technical reports or gathered specifically for the community.

1) Any existing concerns with the wastewater system?
2) How is wastewater treated?
    a. Individual household septic systems?
    b. Centralized wastewater treatment plant?
3) How is wastewater treated?
    a. Aerated lagoon?
    b. Trickling filter?
    c. Digesters (anaerobic or aerobic)?
4) Treated wastewater quality
    a. Is treated wastewater meeting all applicable discharge limits?
    b. If there were violations, what were the violations for?
5) Disposal of treated wastewater
    a. Is discharge to land (percolation, evaporation, leachfields, spray field, other)?
    b. Any discharge to surface water?
6) Disposal of wastewater solids
    a. Are solids dewatered?
    b. How are solids stored?
    c. How are solids from the wastewater process disposed of (land, landfill, other)?
7) Infrastructure
    a. Is there an existing collection system? Is it adequate for existing flows?
    b. Is there the possibility of connecting to a neighboring wastewater system?
    c. What are existing sewer rates?
    d. Is there land available for additional wastewater treatment?
    e. Grade of existing wastewater operator?
    f. Are pump curves and horsepower available for all pumps?
8) Funding
    a. Has funding been applied for from any agency?

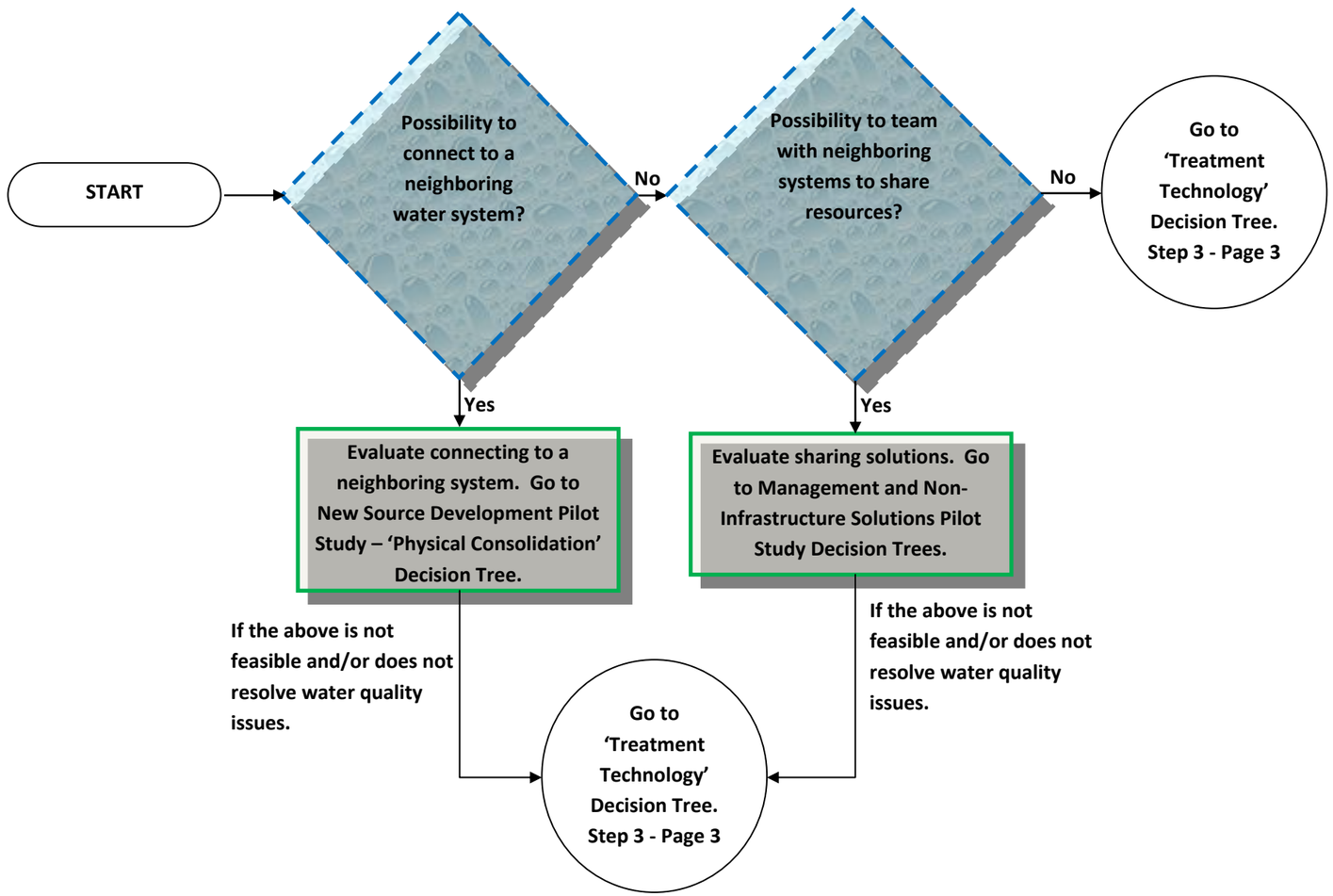
TECHNICAL SOLUTIONS DECISION STARTING TREE

Step 1



NON-TREATMENT TECHNICAL SOLUTIONS DECISION TREE

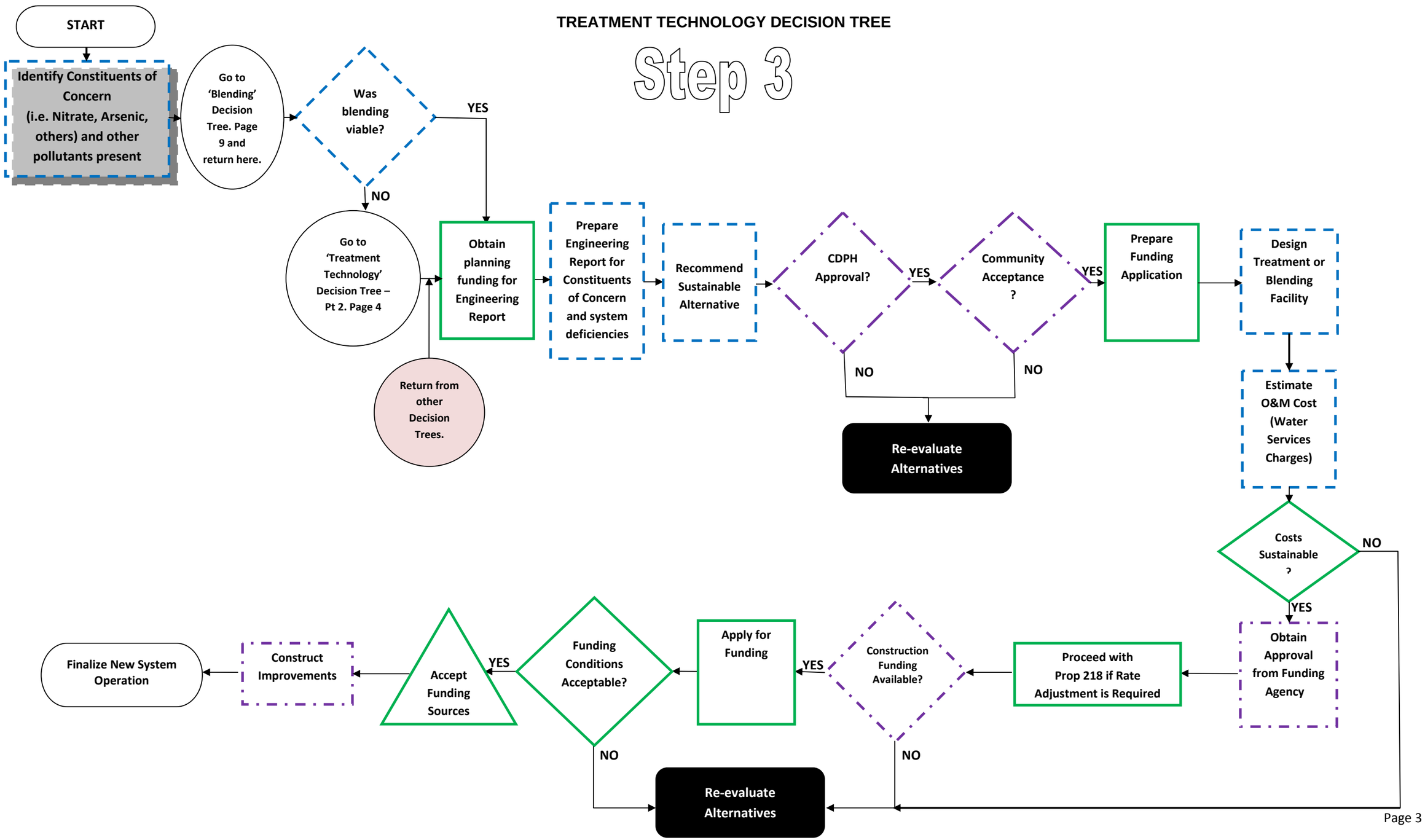
Step 2



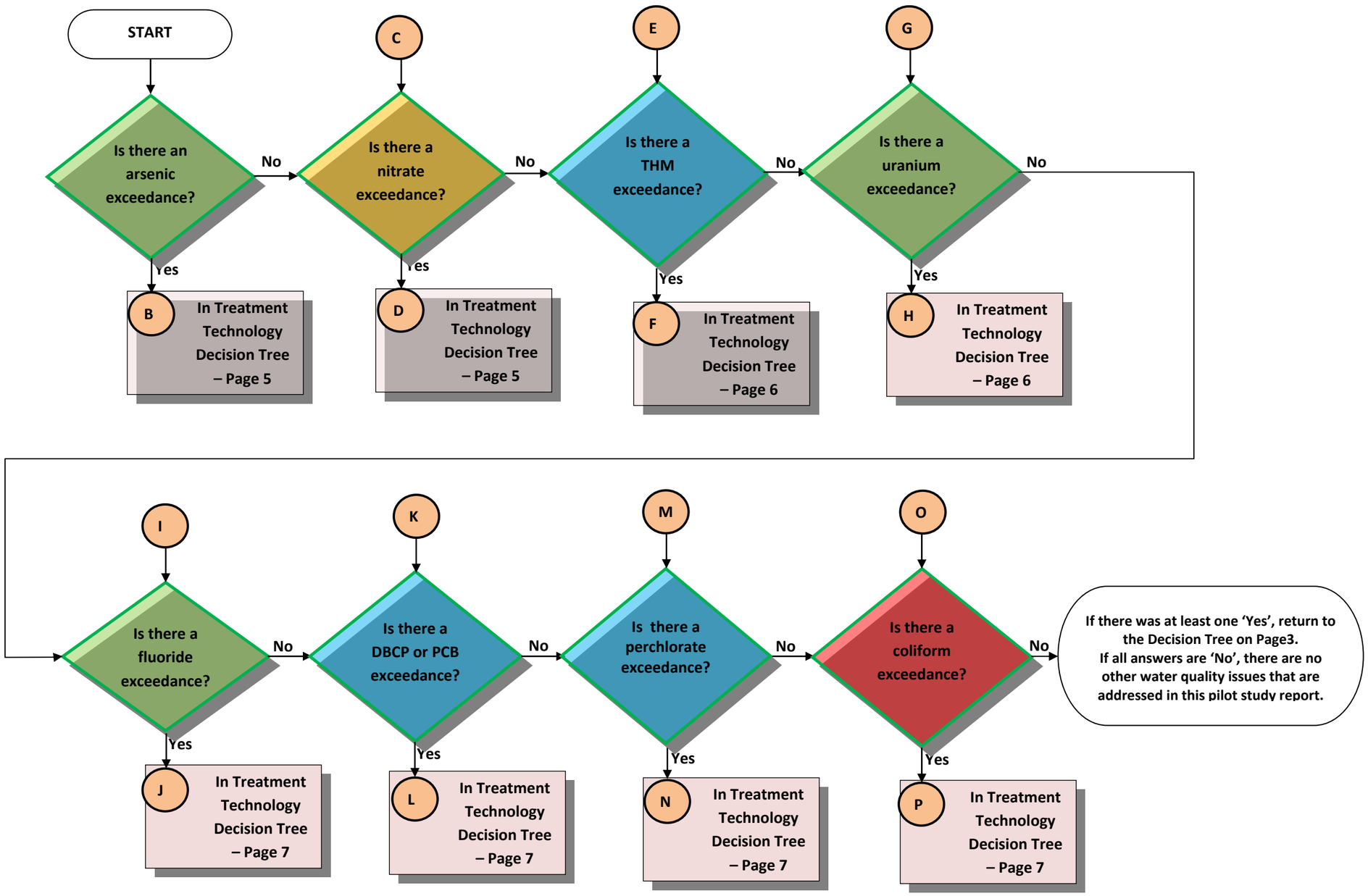
TECHNICAL SOLUTIONS DECISION TREES

TREATMENT TECHNOLOGY DECISION TREE

Step 3

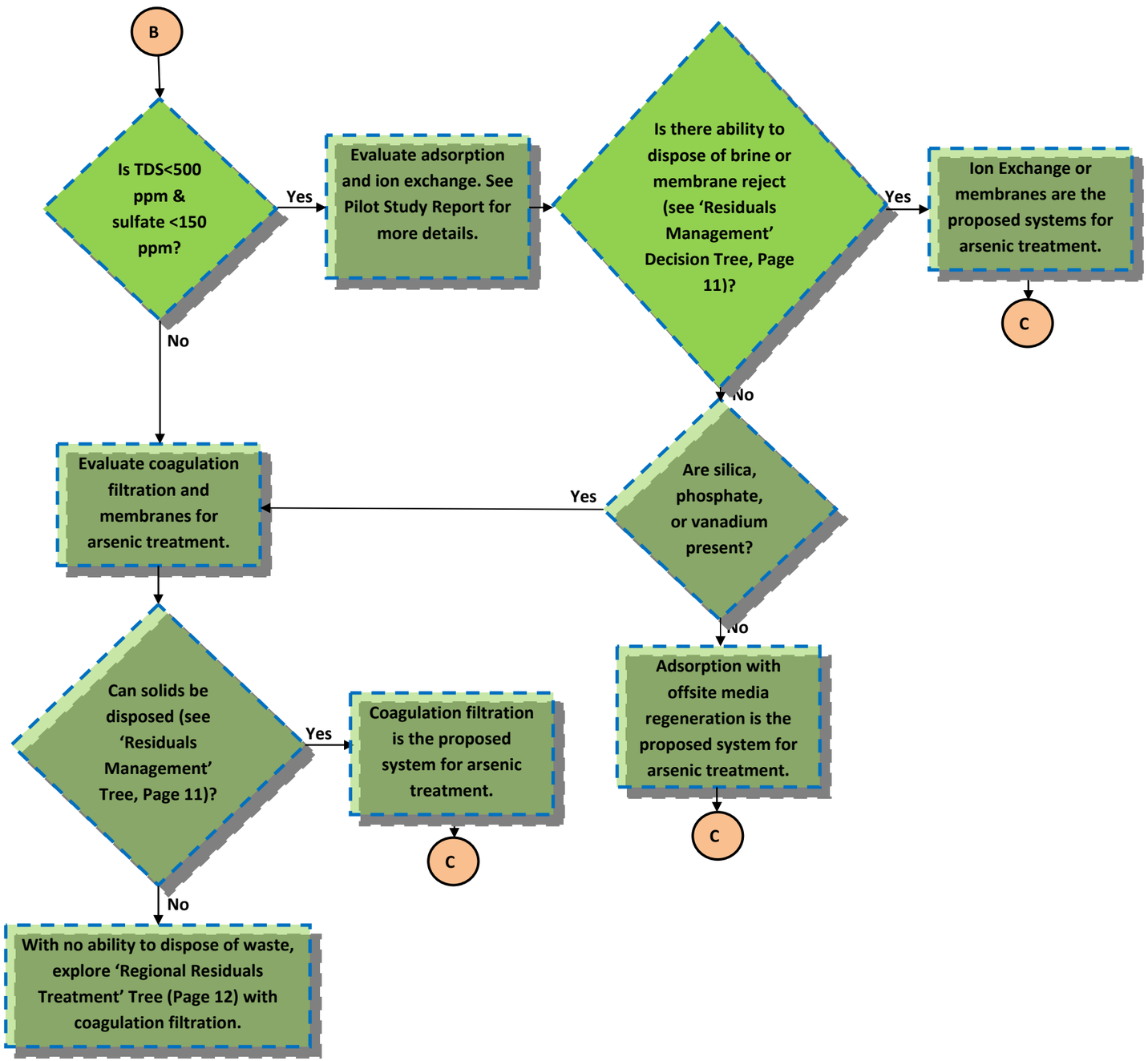


TREATMENT TECHNOLOGY DECISION TREE – Part 2

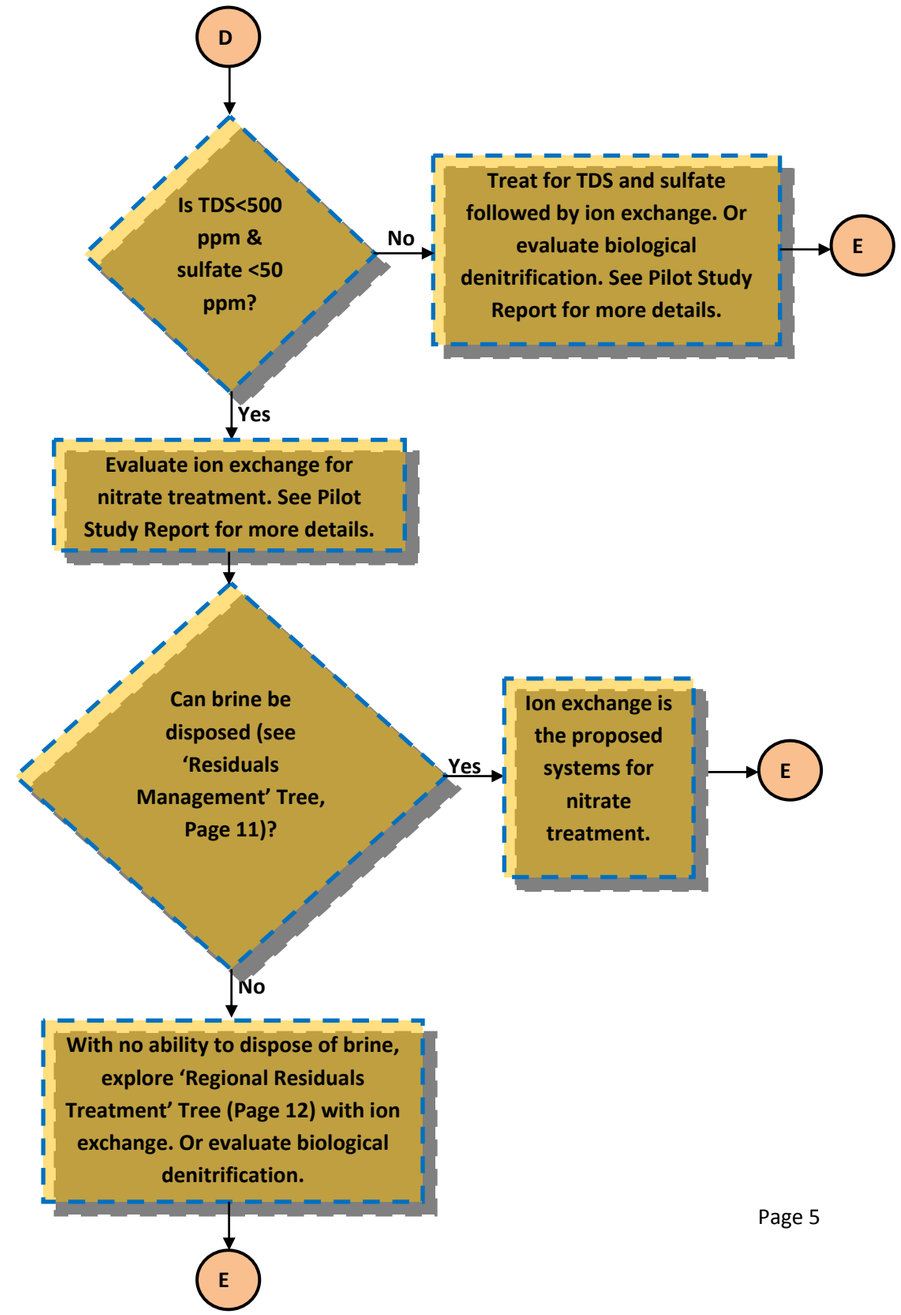


TREATMENT TECHNOLOGY DECISION TREE – Part 3

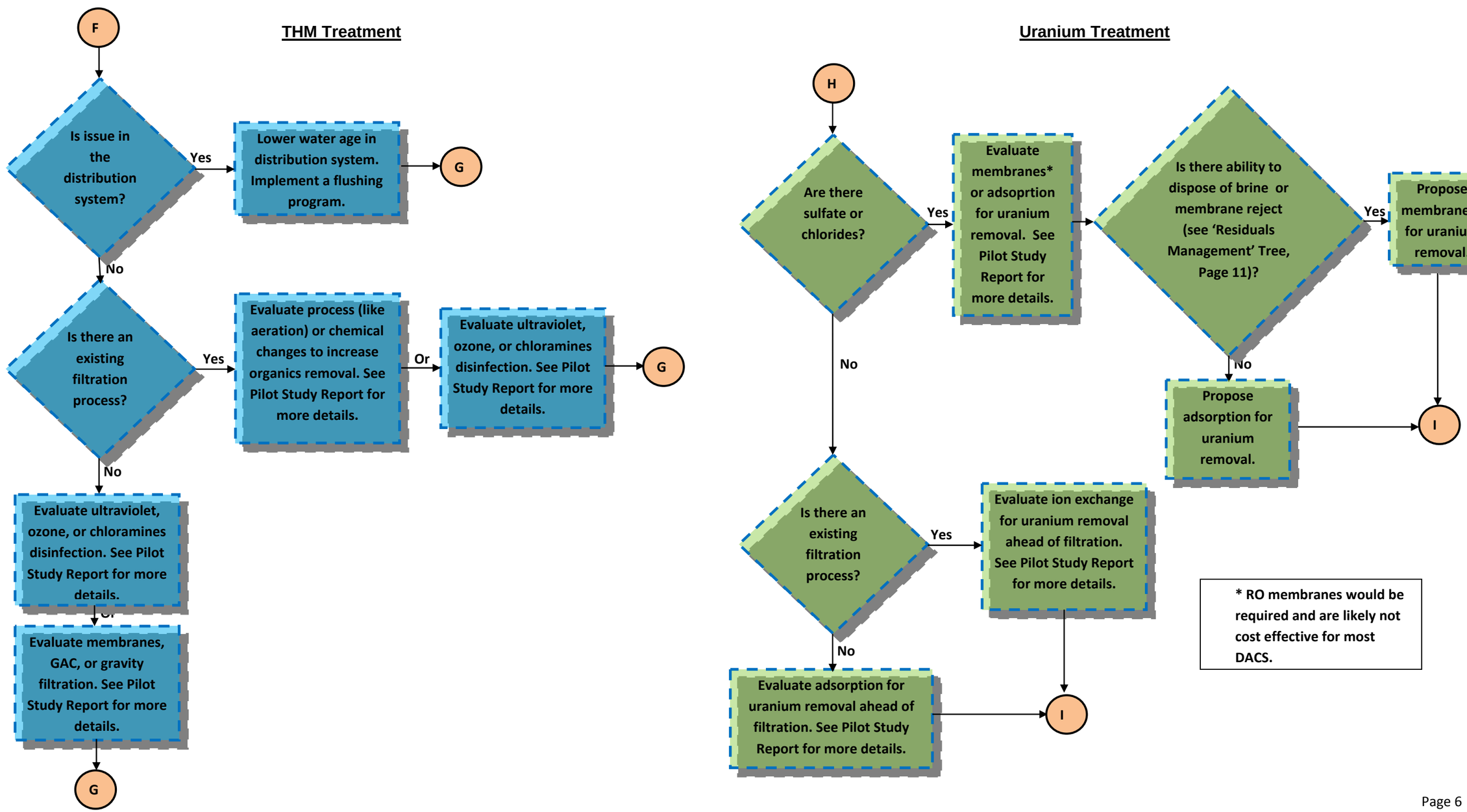
Arsenic Treatment



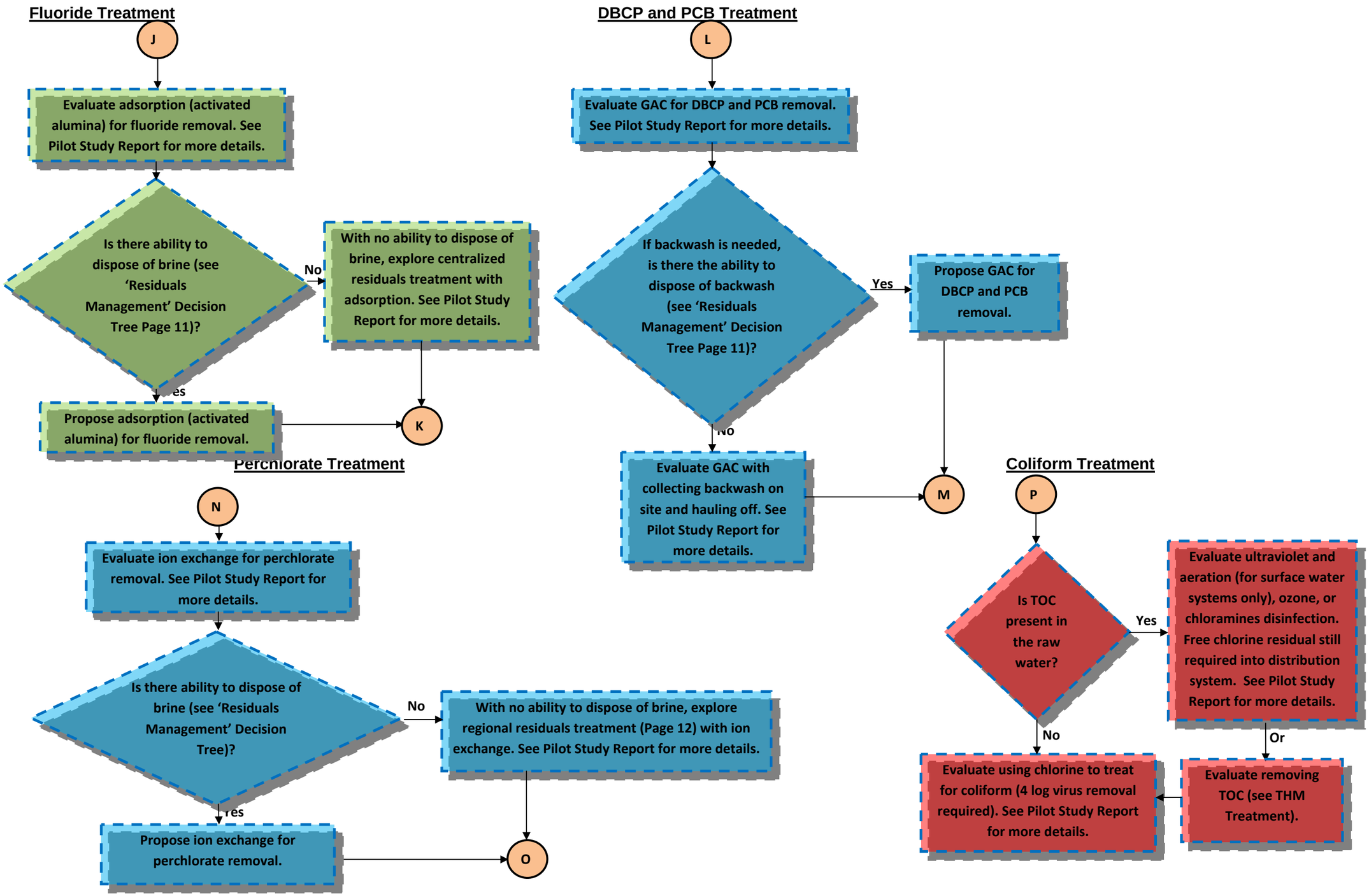
Nitrate Treatment



TREATMENT TECHNOLOGY DECISION TREE – Part 4

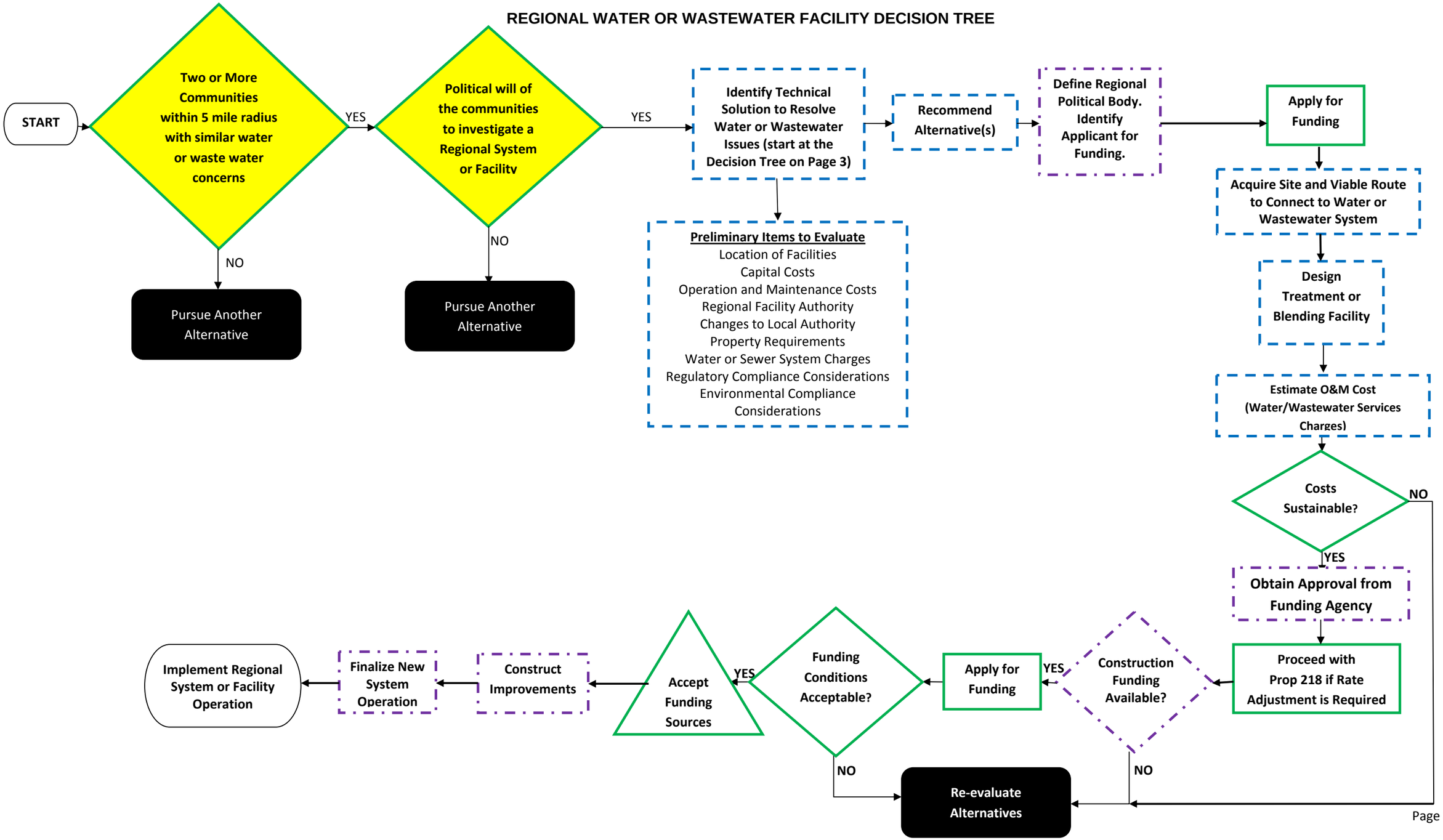


TREATMENT TECHNOLOGY DECISION TREE – Part 5

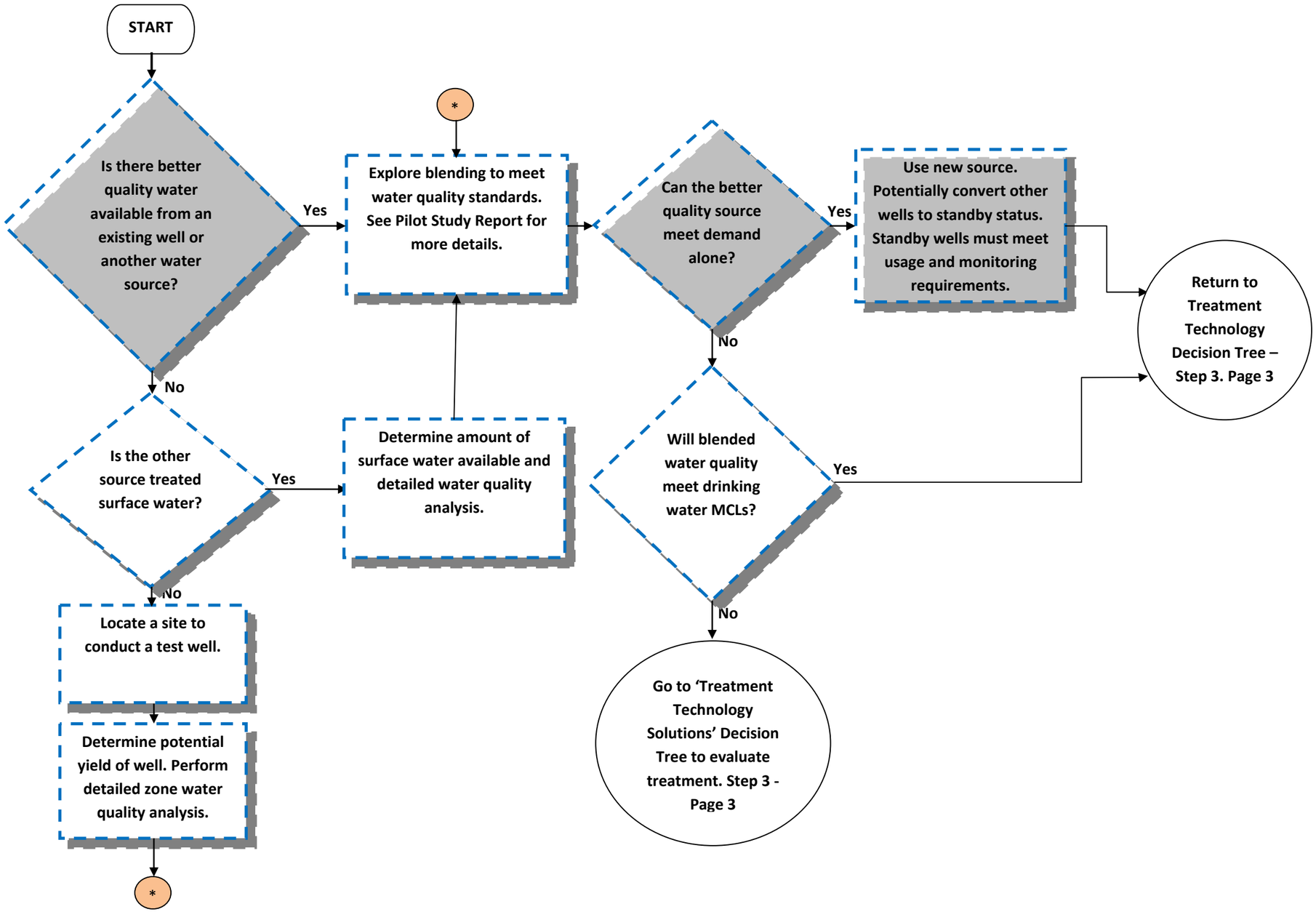


TECHNICAL SOLUTIONS DECISION TREES

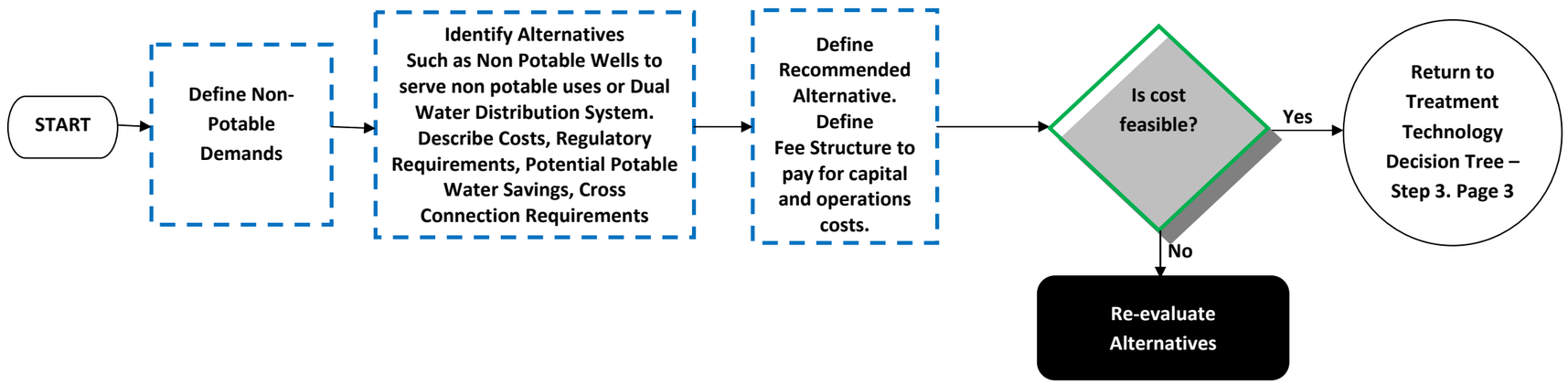
REGIONAL WATER OR WASTEWATER FACILITY DECISION TREE



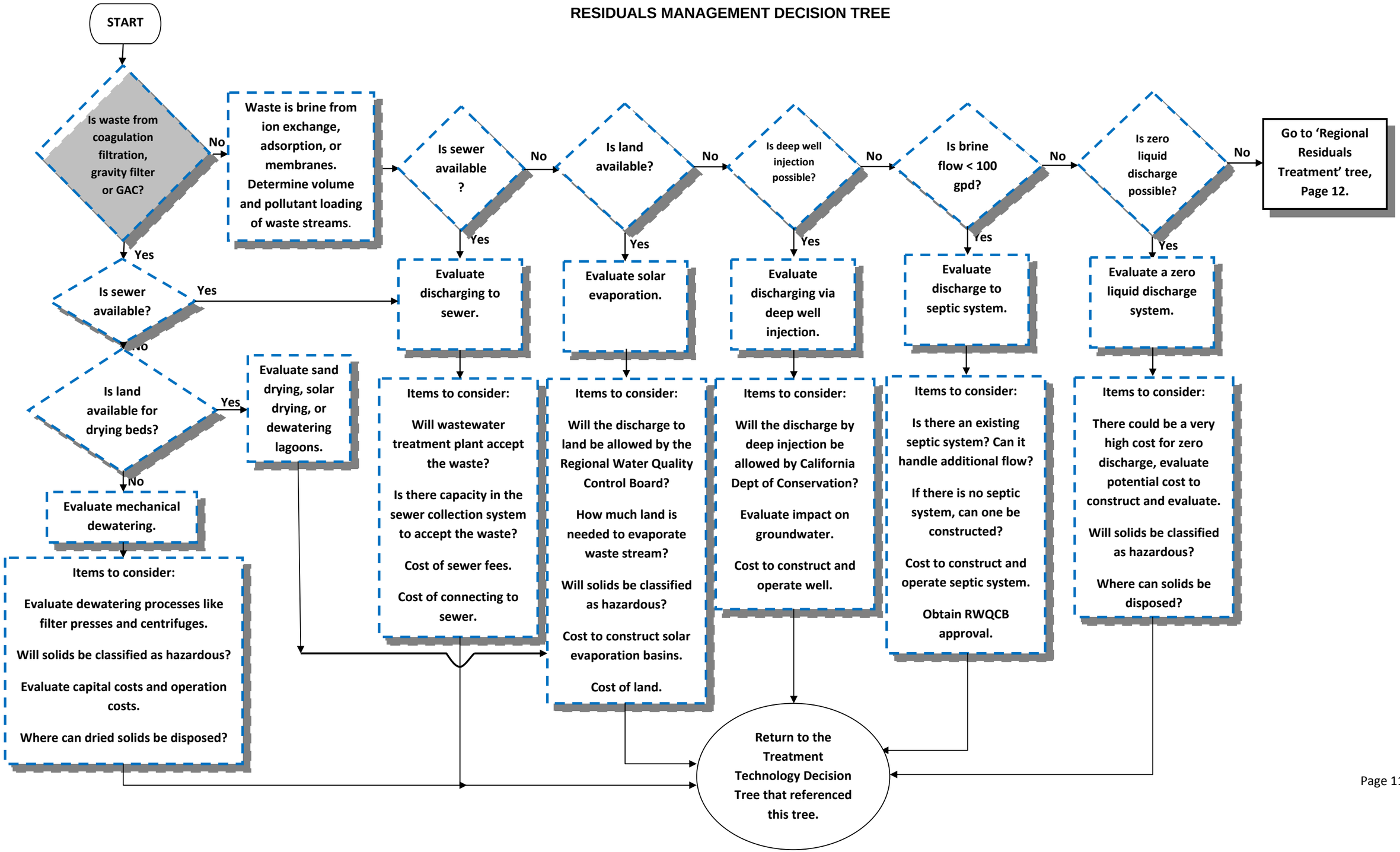
BLENDING DECISION TREE



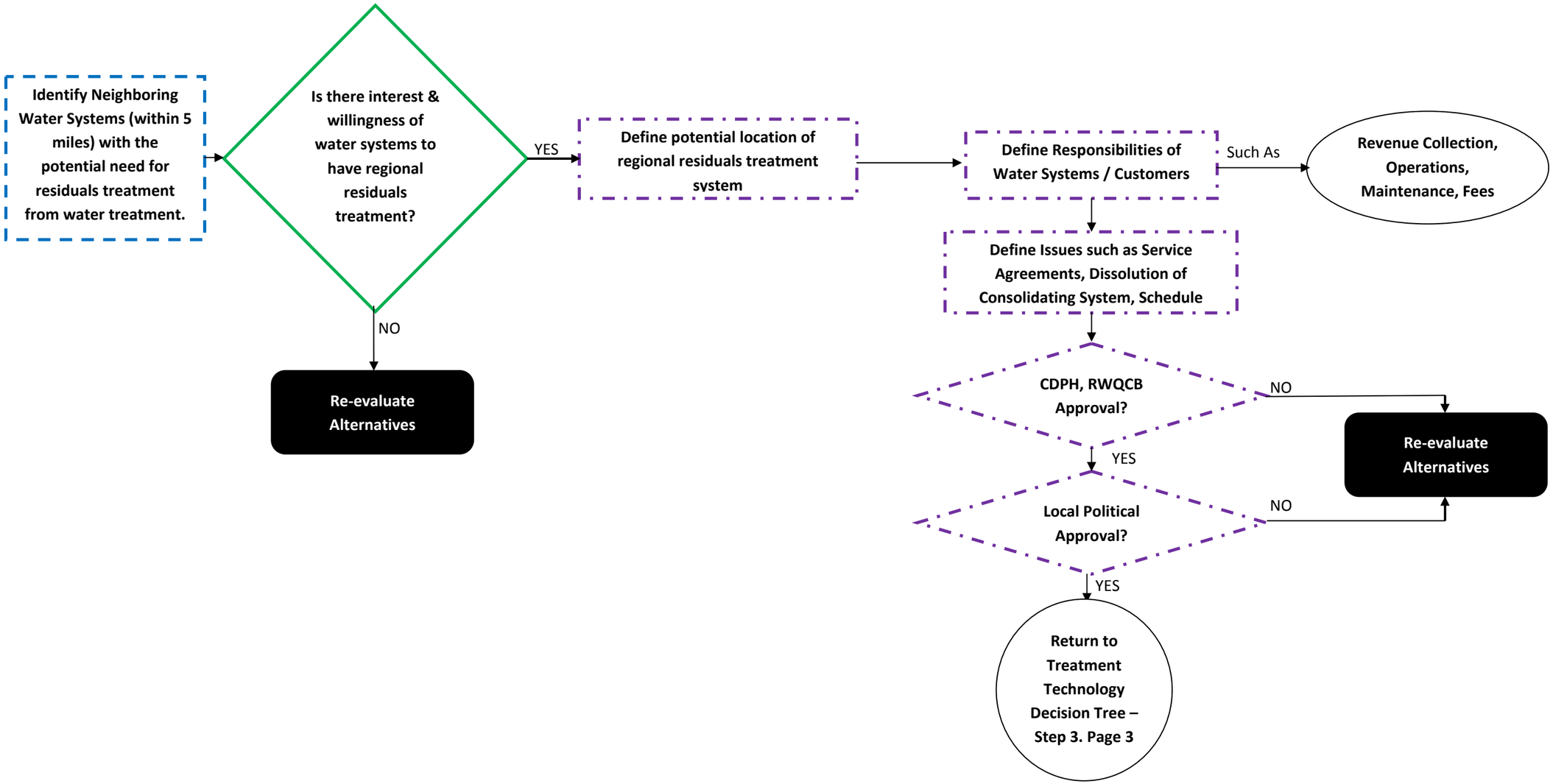
DUAL WATER SYSTEM DECISION TREE



RESIDUALS MANAGEMENT DECISION TREE

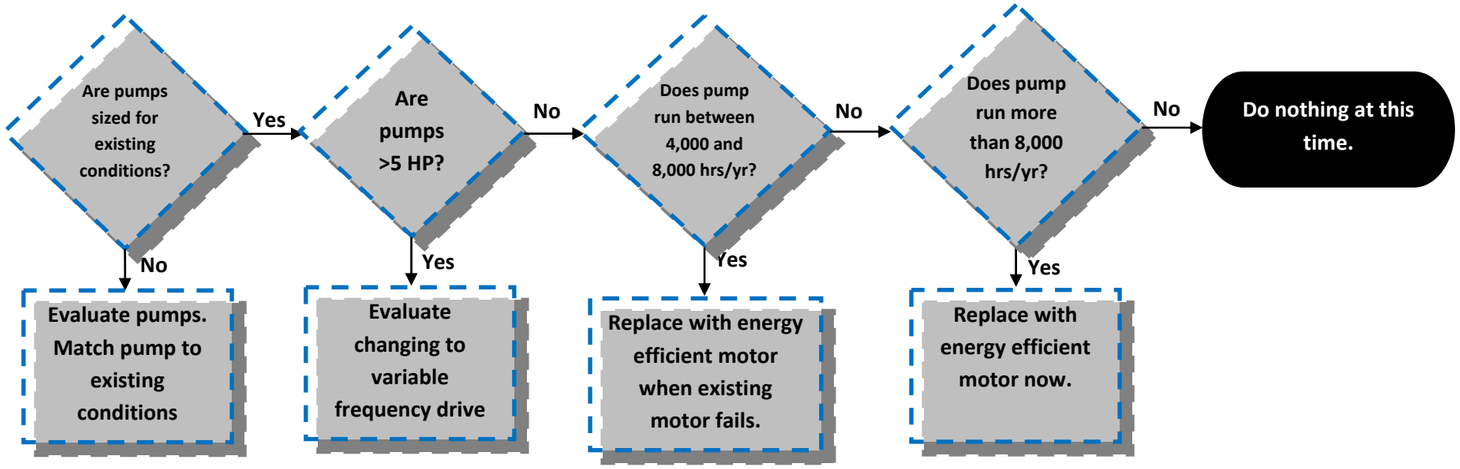


REGIONAL RESIDUALS MANAGEMENT DECISION TREE

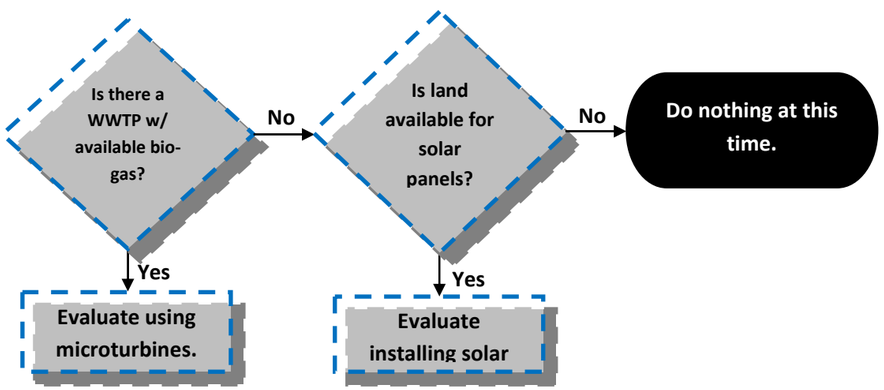


TECHNICAL SOLUTIONS DECISION TREES

Energy Conservation



Renewable Energy

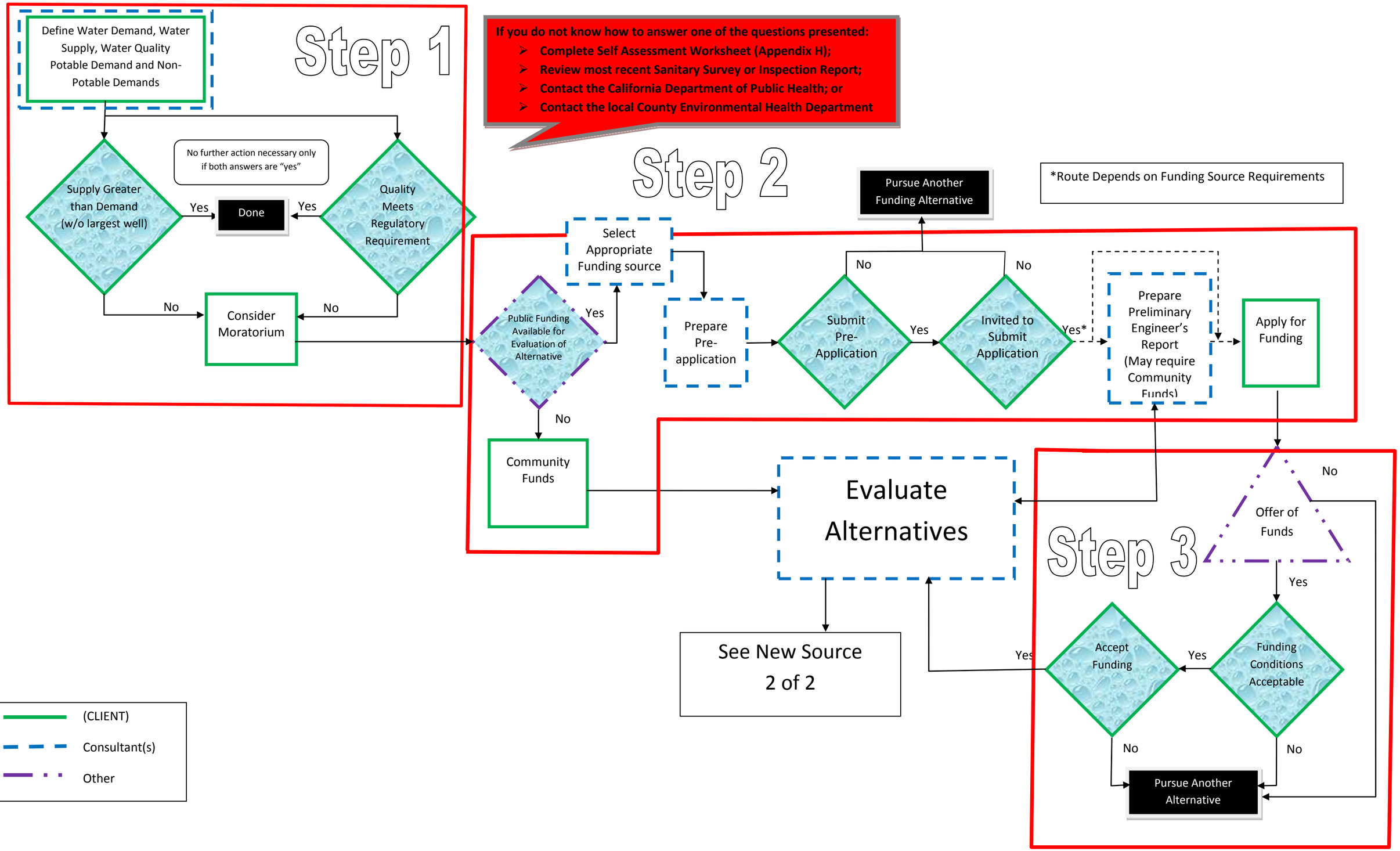


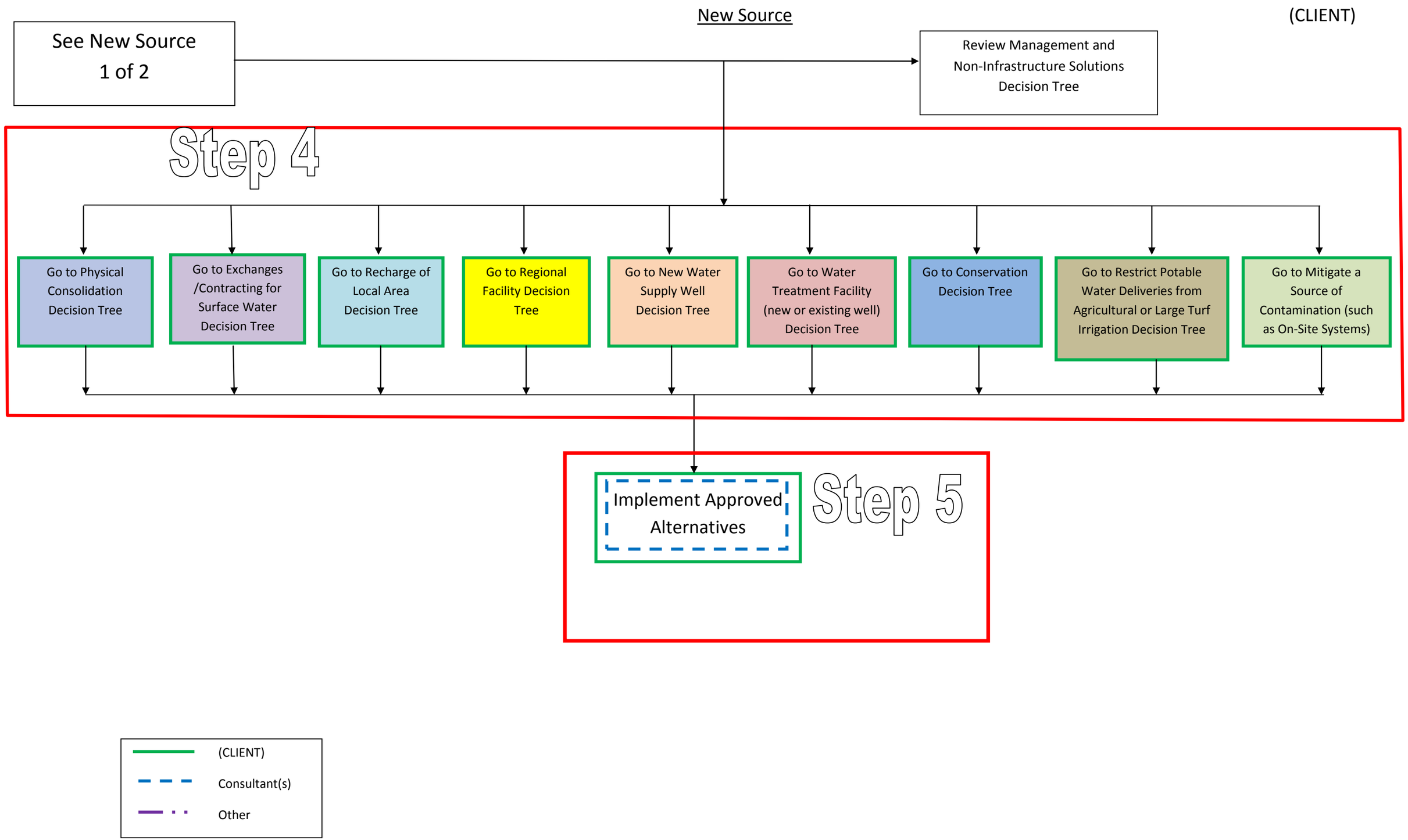
NEW SOURCE DEVELOPMENT DECISION TREES

start

New Source

(CLIENT)

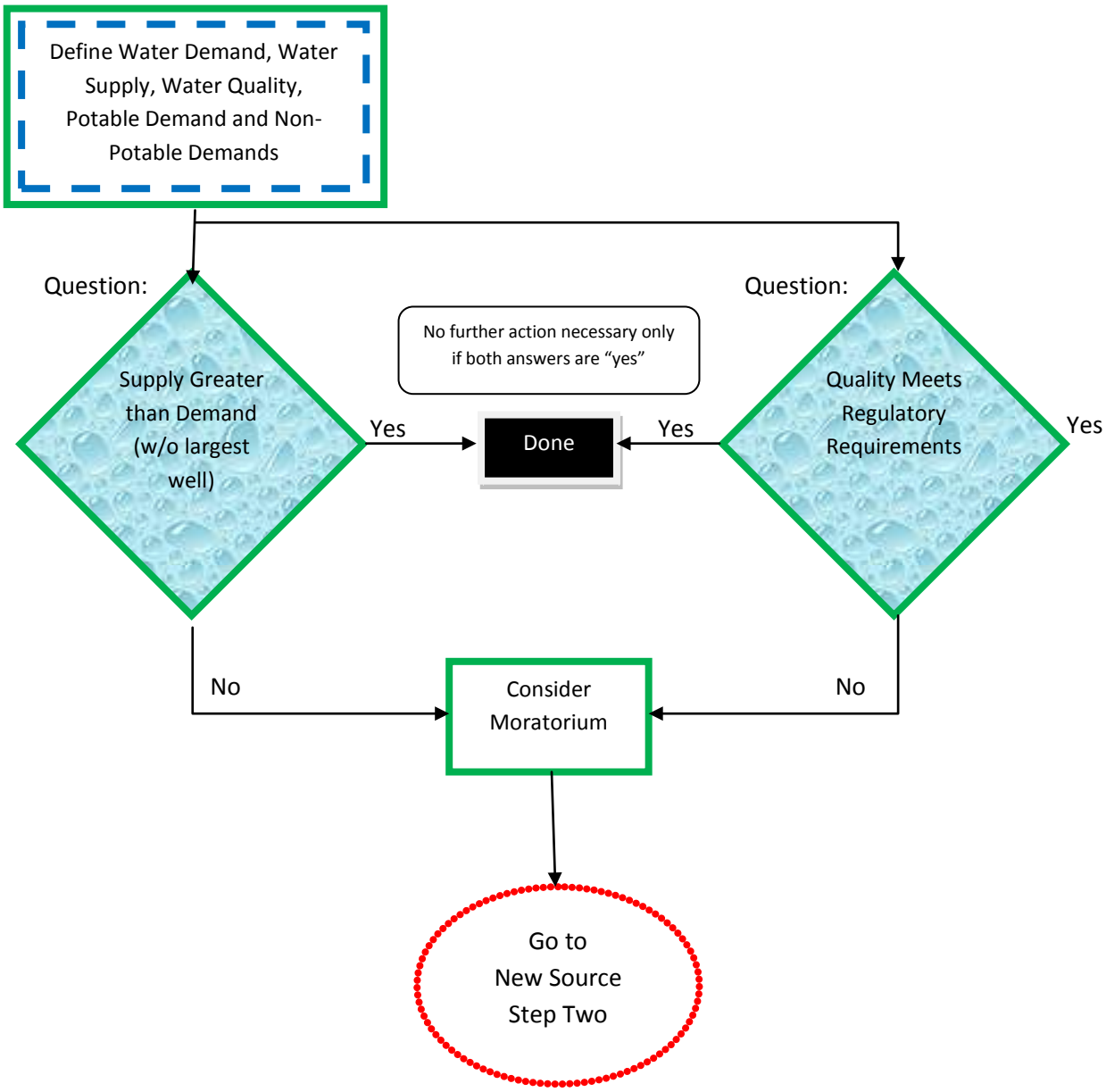


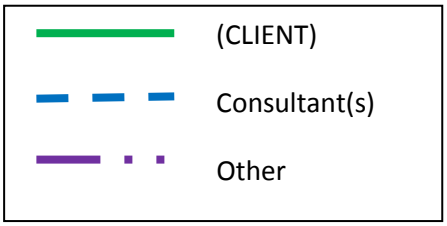

New Source
(CLIENT)
See New Source 1 of 2
Review Management and Non-Infrastructure Solutions Decision Tree
Step 4
Go to Physical Consolidation Decision Tree
Go to Exchanges /Contracting for Surface Water Decision Tree
Go to Recharge of Local Area Decision Tree
Go to Regional Facility Decision Tree
Go to New Water Supply Well Decision Tree
Go to Water Treatment Facility (new or existing well) Decision Tree
Go to Conservation Decision Tree
Go to Restrict Potable Water Deliveries from Agricultural or Large Turf Irrigation Decision Tree
Go to Mitigate a Source of Contamination (such as On-Site Systems)
Implement Approved Alternatives
Step 5
(CLIENT)
Consultant(s)
Other

(CLIENT)

New Source

Step One





(CLIENT)

New Source

Step One

(CLIENT)

CLIENT)

Population:

Service Connections:

Water Rate:

Average Monthly Bill:

FY Budget (water only):

FY Year-to-Date Expenditures (water only):

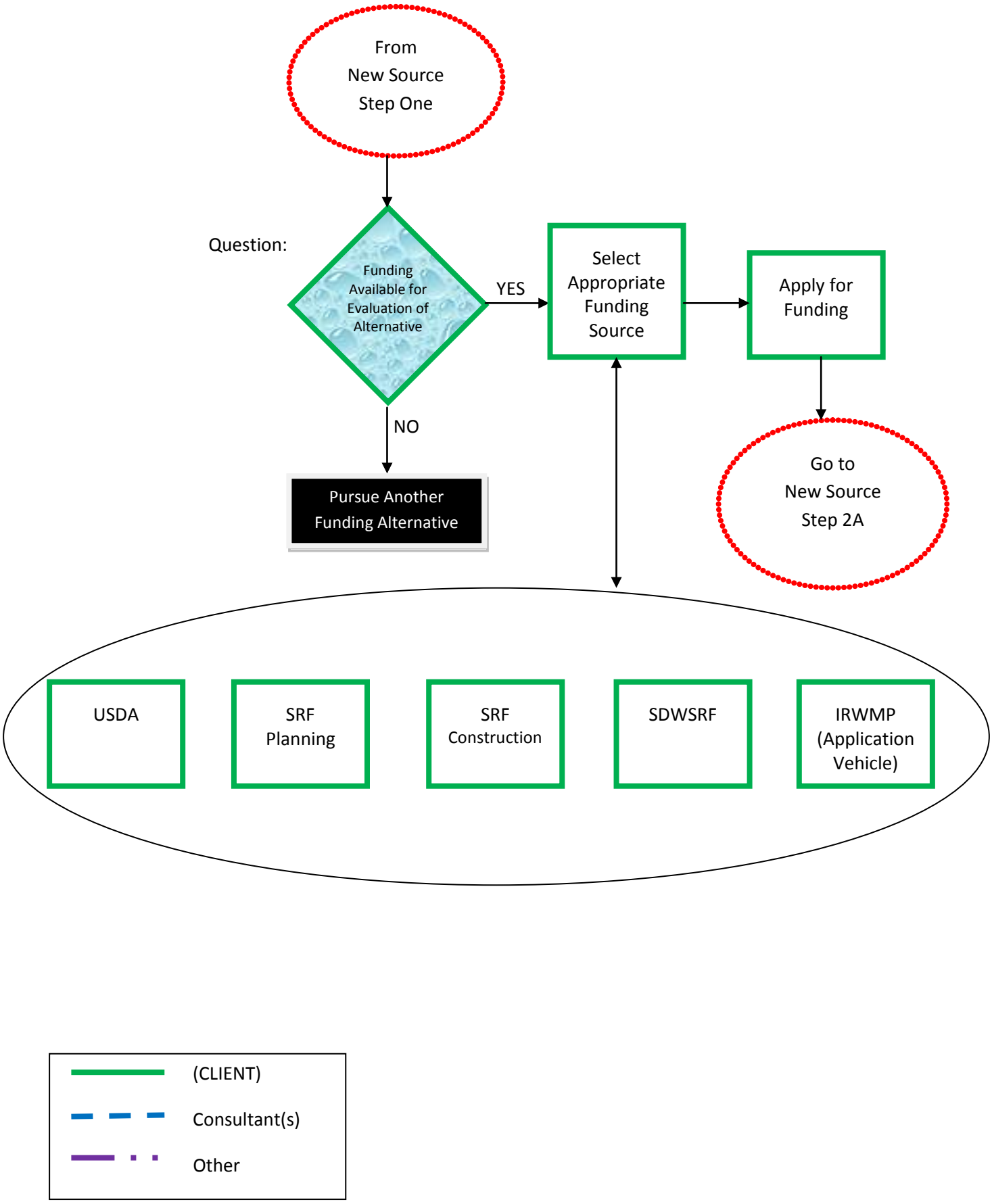
Distribution System Age:

Demand (GPM

(CLIENT)

New Source

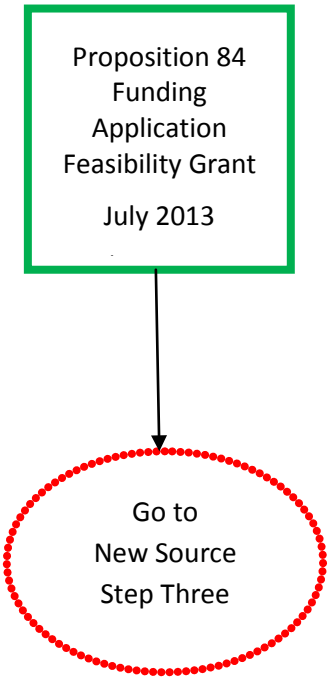
Step Two



(CLIENT)

New Source

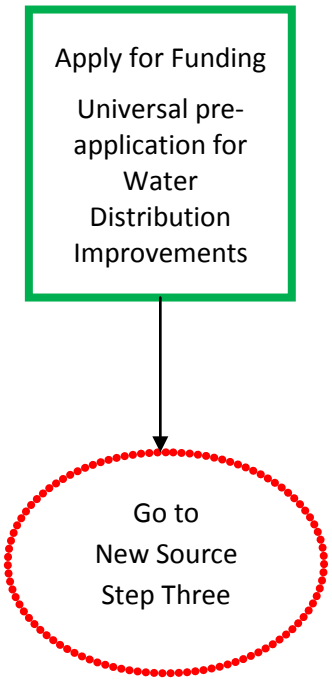
Step Two A



(CLIENT)

New Source

Step Two B



(CLIENT)

New Source

Step Two

(list each Grant application CLIENT for)

(CLIENT) (Application type)
Prepared by:
Cost to Prepare:
Source of Funds:
Timeline of Preparation
Response to Application:

(CLIENT) (Application type)
Prepared by:
Cost to Prepare:
Source of Funds:
Timeline of Preparation
Response to Application:

(CLIENT) (Application type)
Prepared by:
Cost to Prepare:
Source of Funds:
Timeline of Preparation
Response to Application:

(CLIENT) (Application type)
Prepared by:
Cost to Prepare:
Source of Funds:
Timeline of Preparation
Response to Application:

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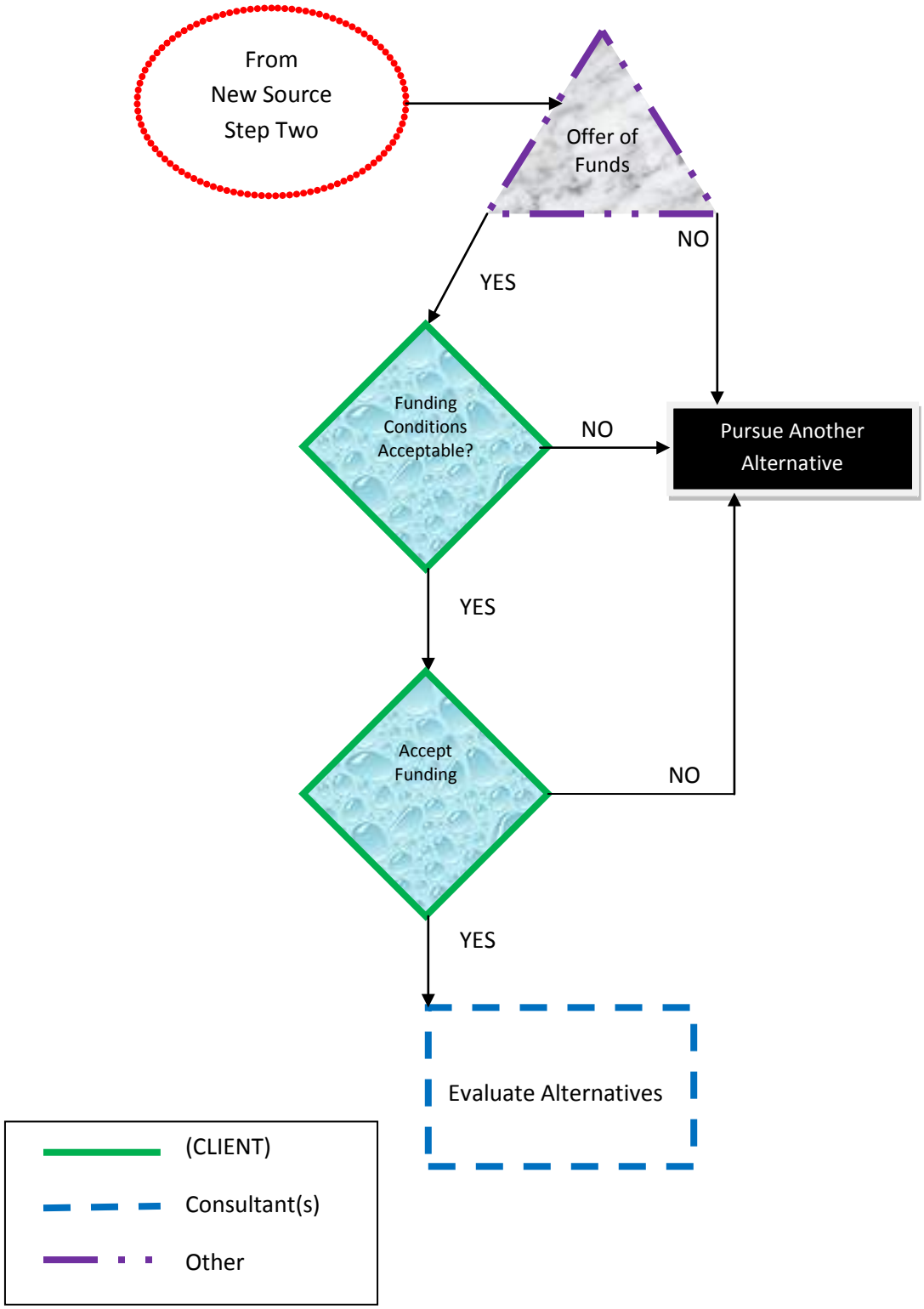
Prepared by:
Cost to Prepare:
Source of Funds:
Timeline of Preparation
Response to Application:

(CLIENT)

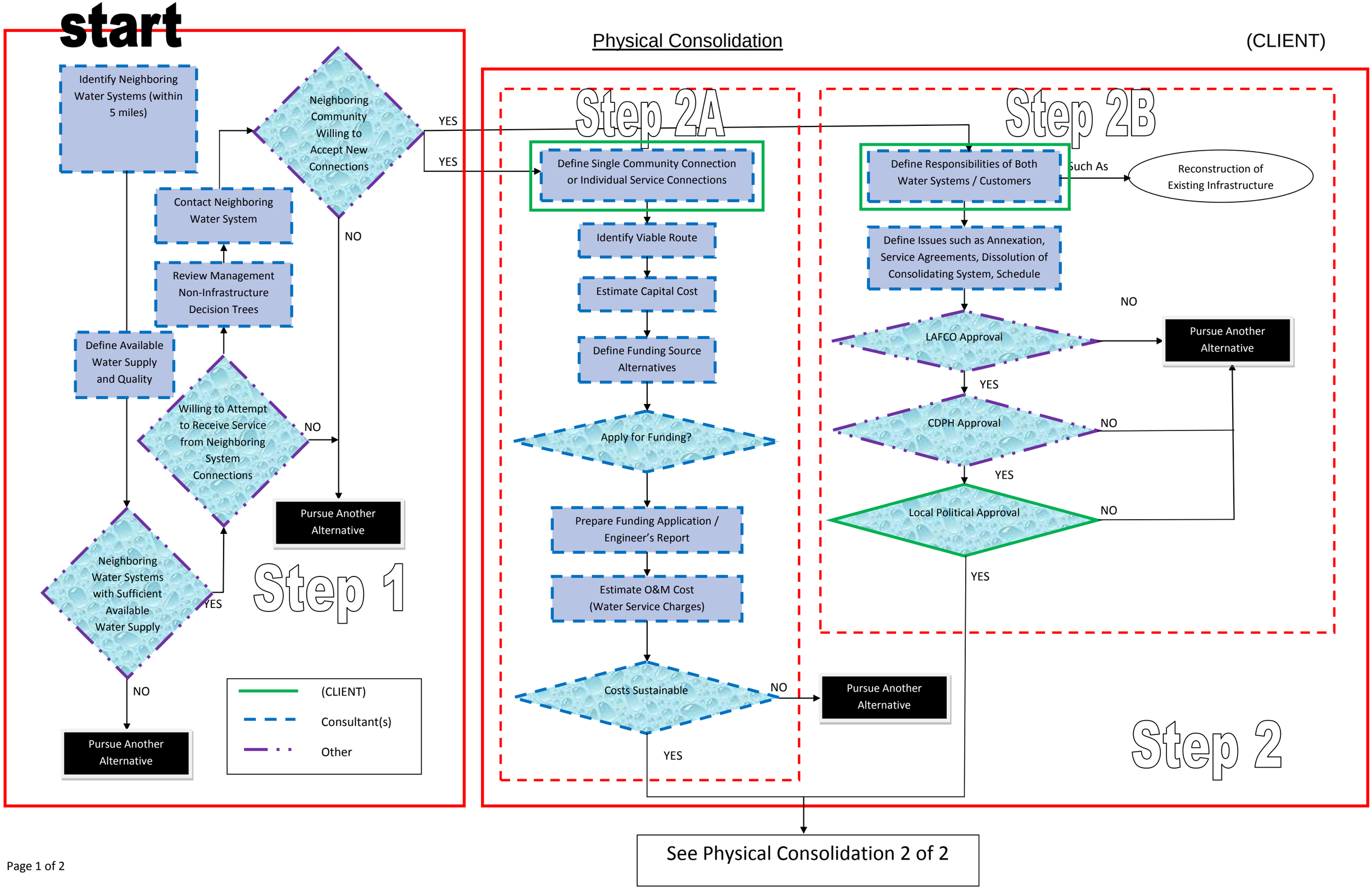
New Source

Step Three



Physical Consolidation

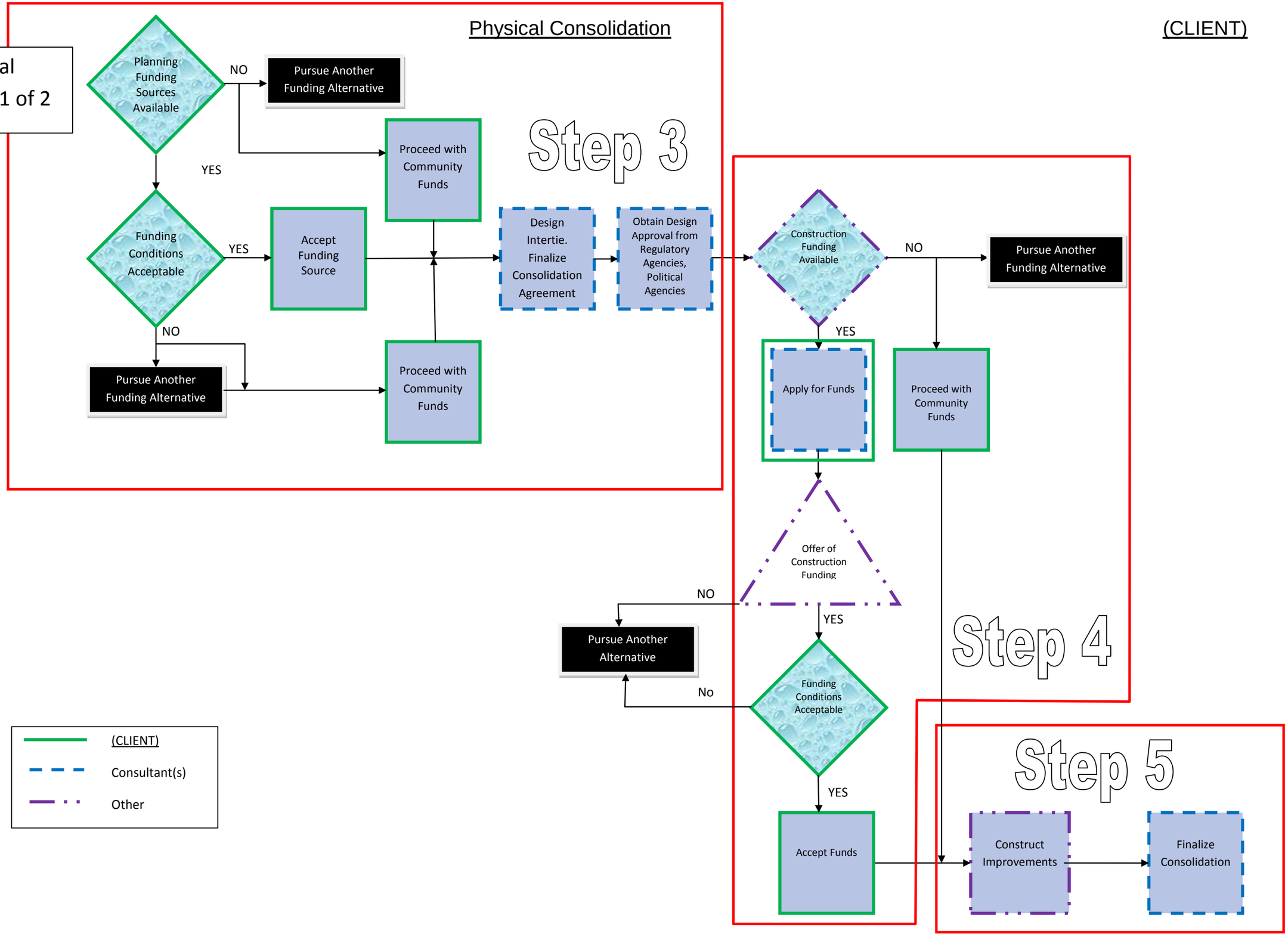
(CLIENT)



See Physical Consolidation 1 of 2

(CLIENT)

Physical Consolidation

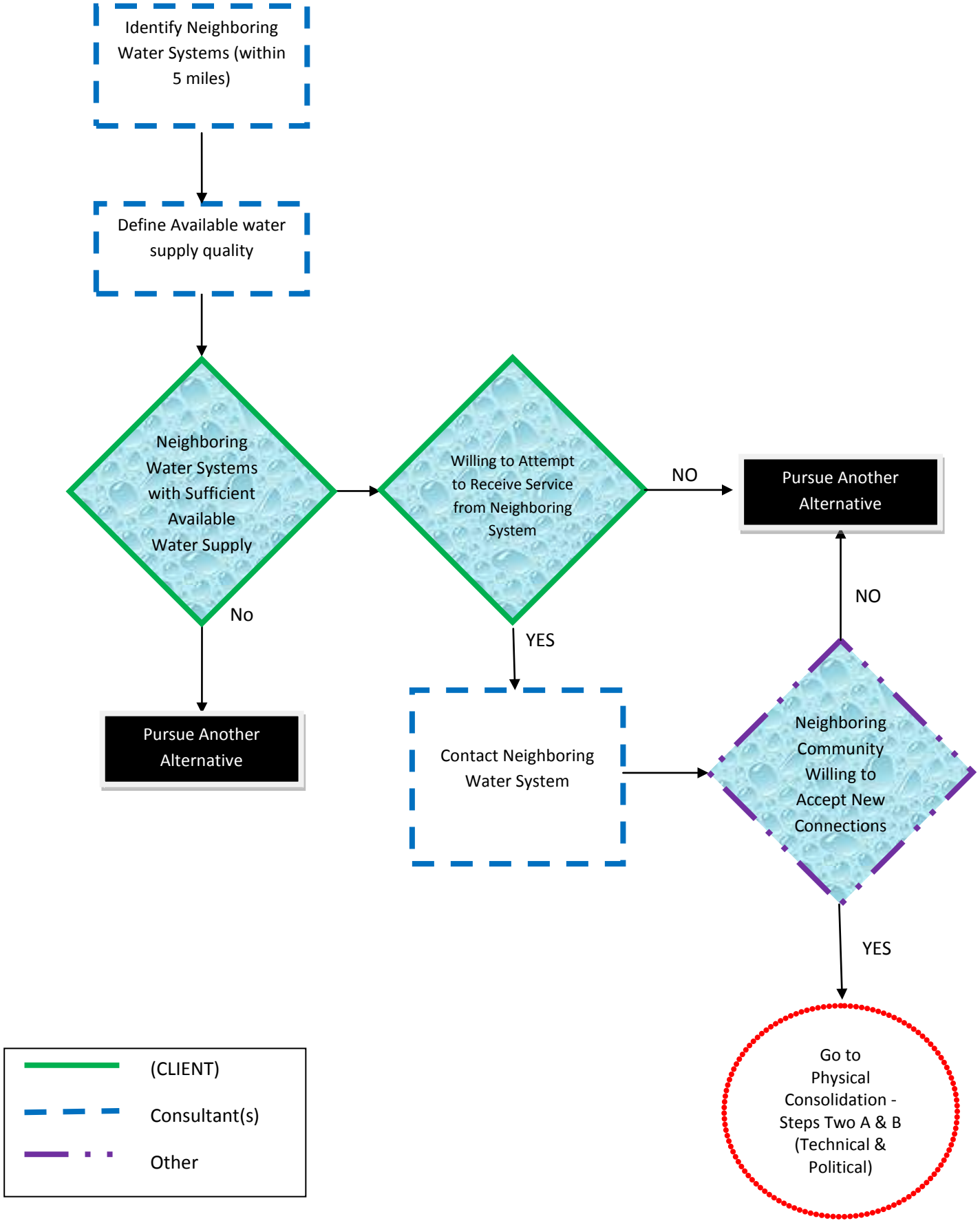


(CLIENT)

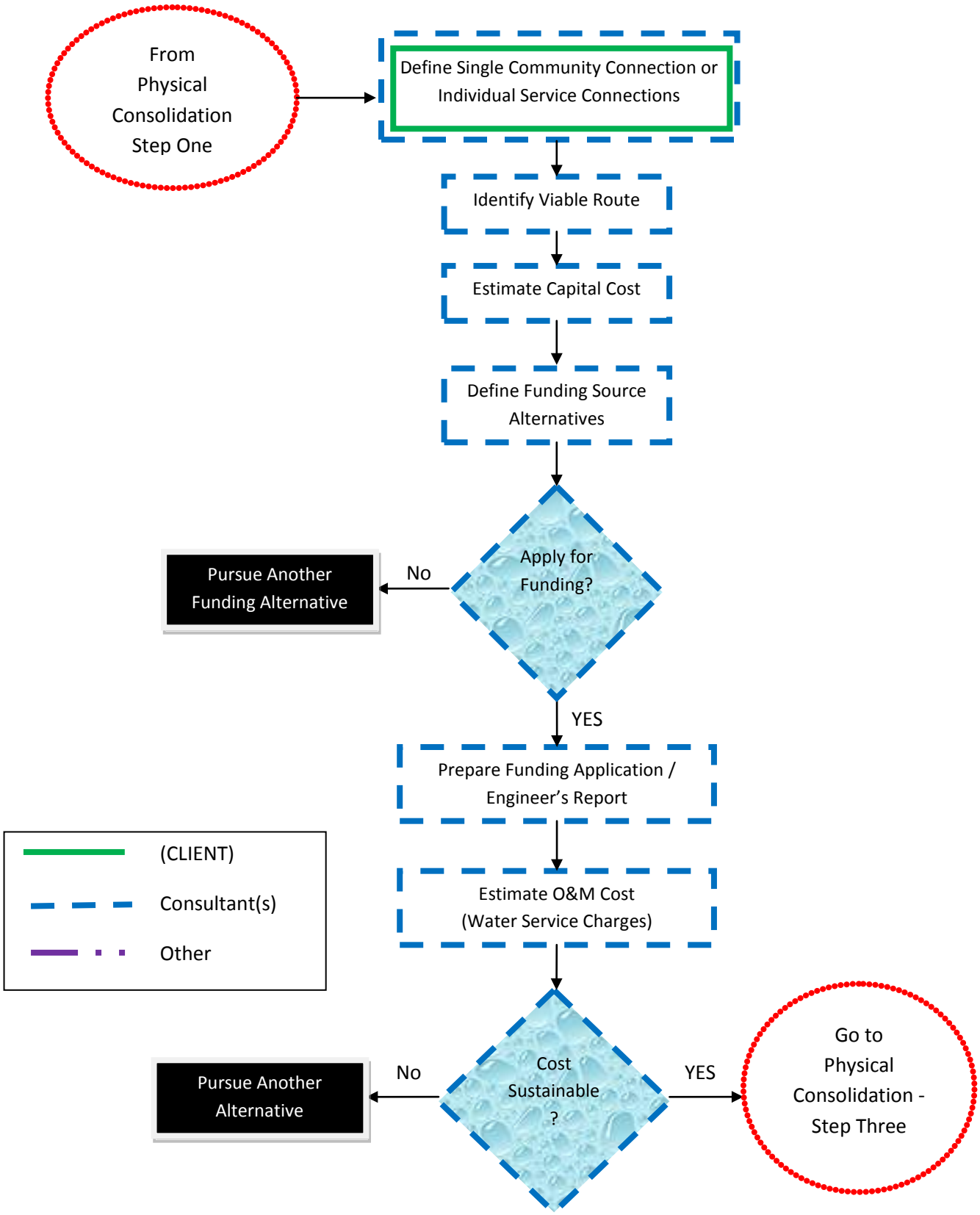
Consultant(s)

Other

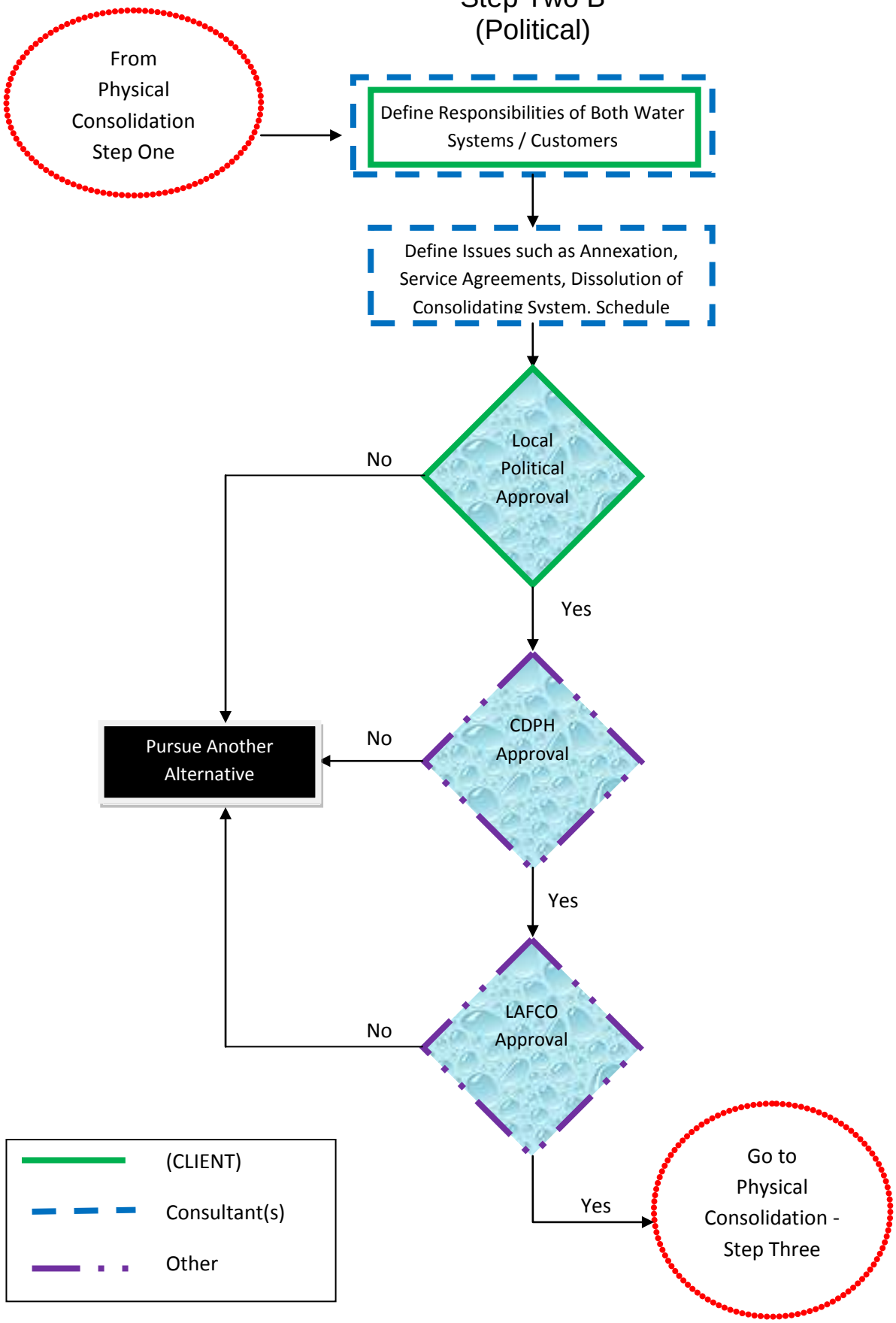
(CLIENT)
Physical Consolidation
Step One



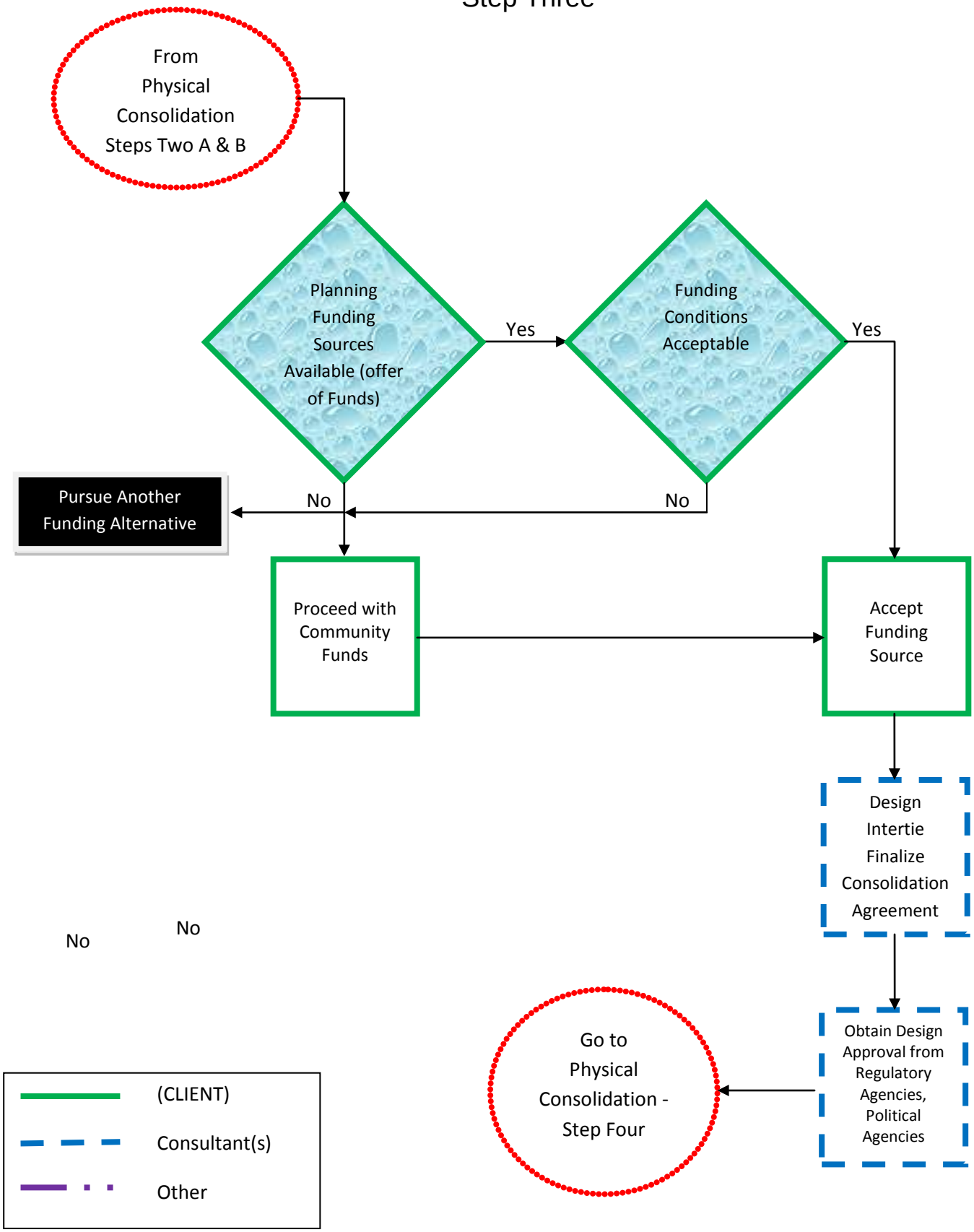
(CLIENT)
Physical Consolidation
Step Two A
(Technical)



(CLIENT)
Physical Consolidation
Step Two B
(Political)



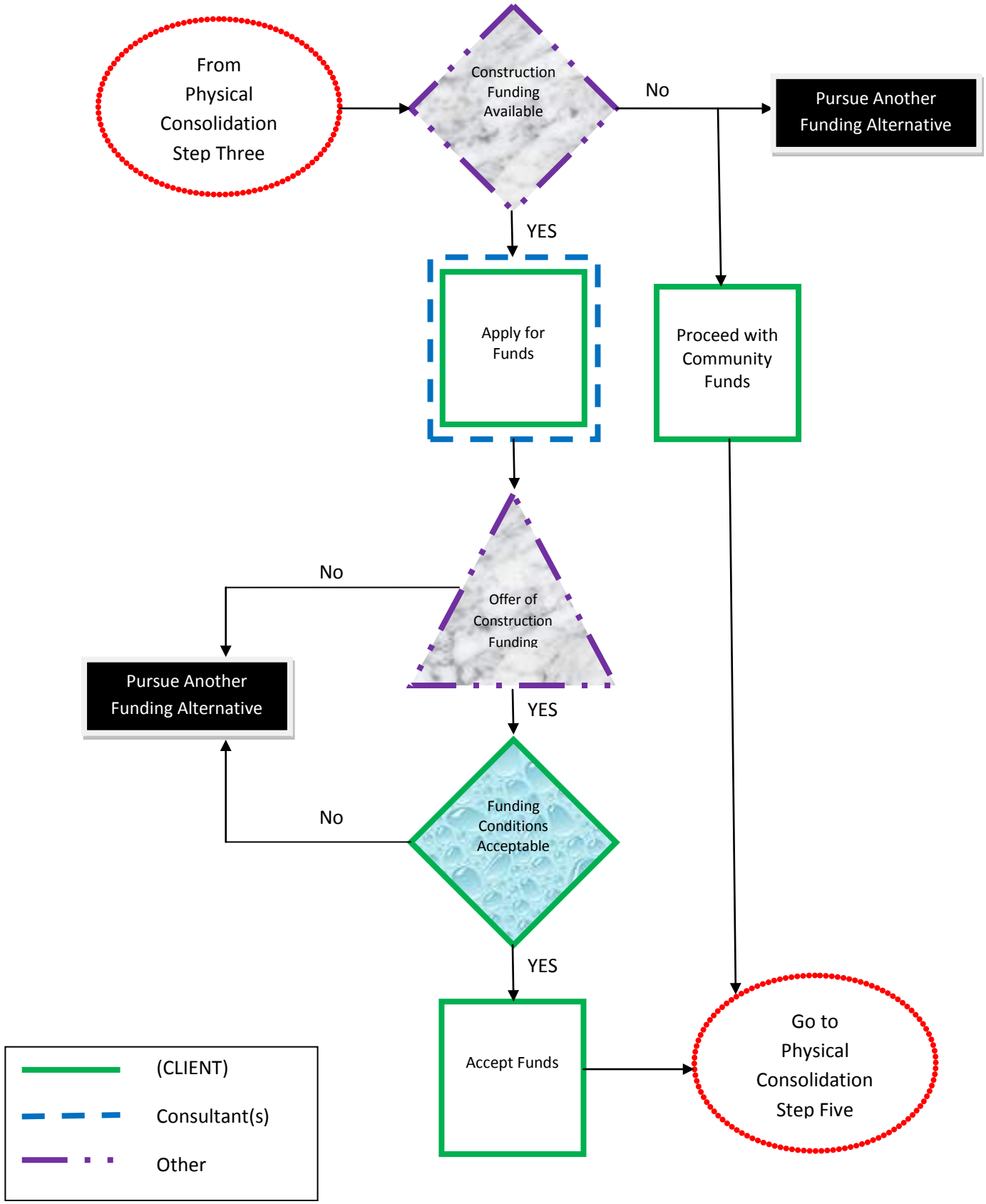
(CLIENT)
Physical Consolidation
Step Three



(CLIENT)

Physical Consolidation

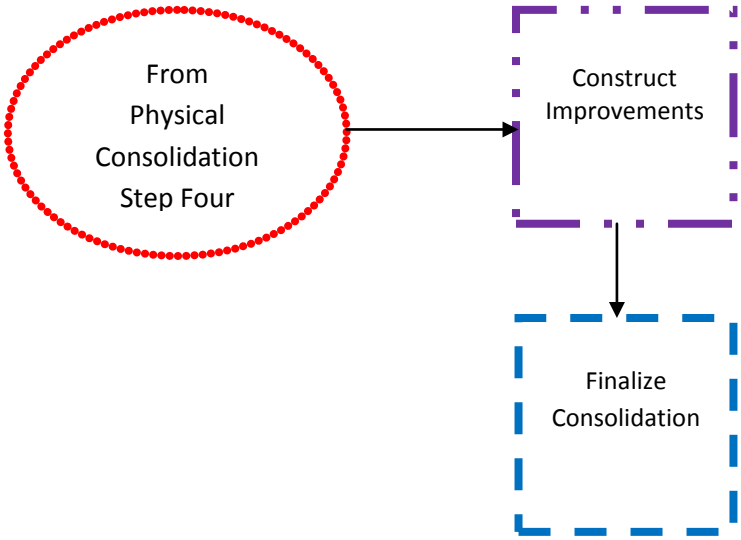
Step Four

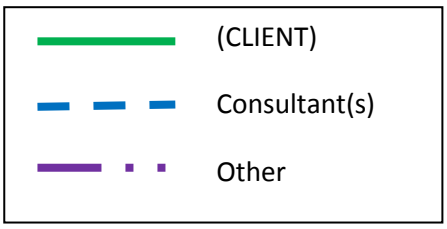


(CLIENT)

Physical Consolidation

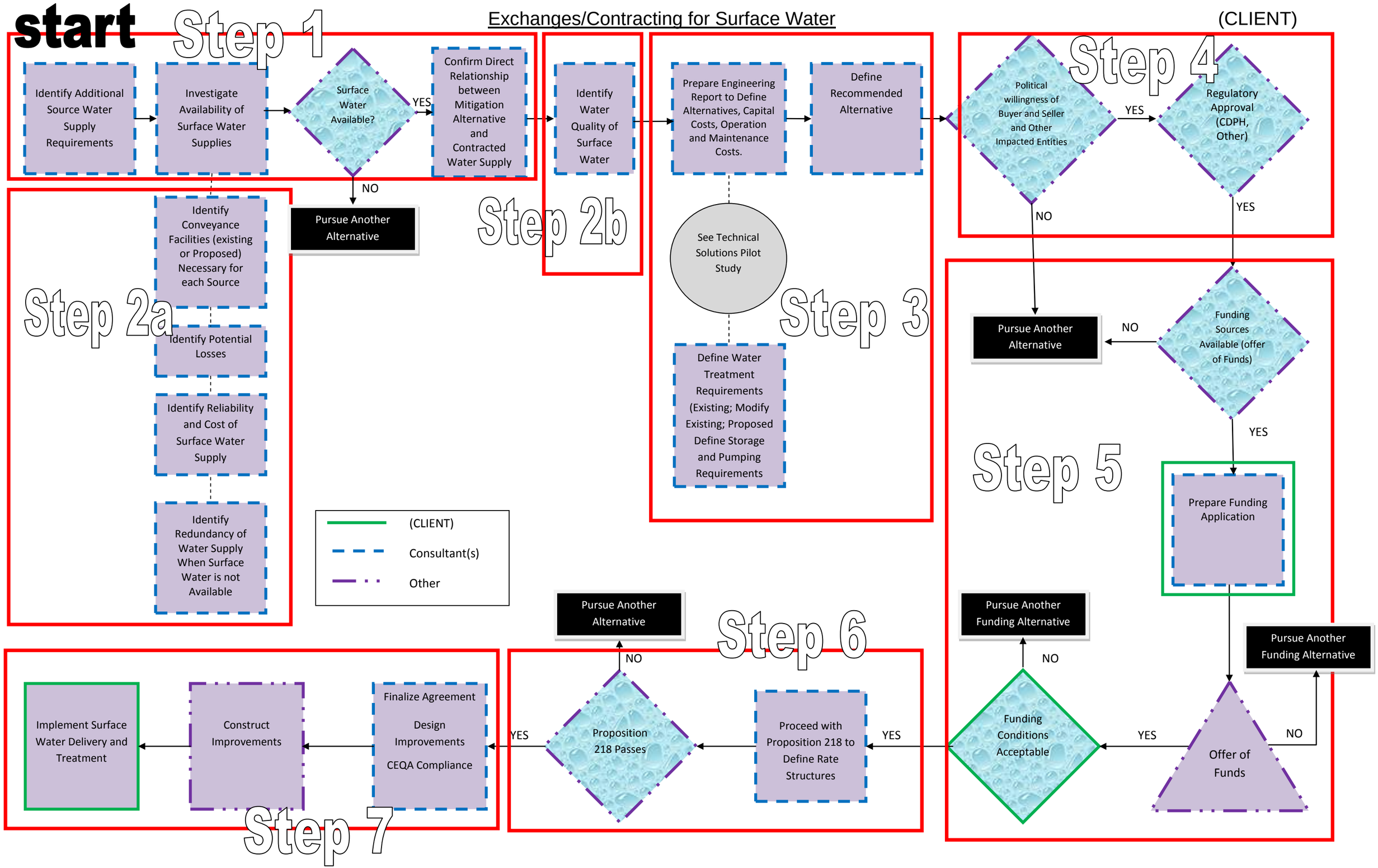
Step Five





Exchanges/Contracting for Surface Water

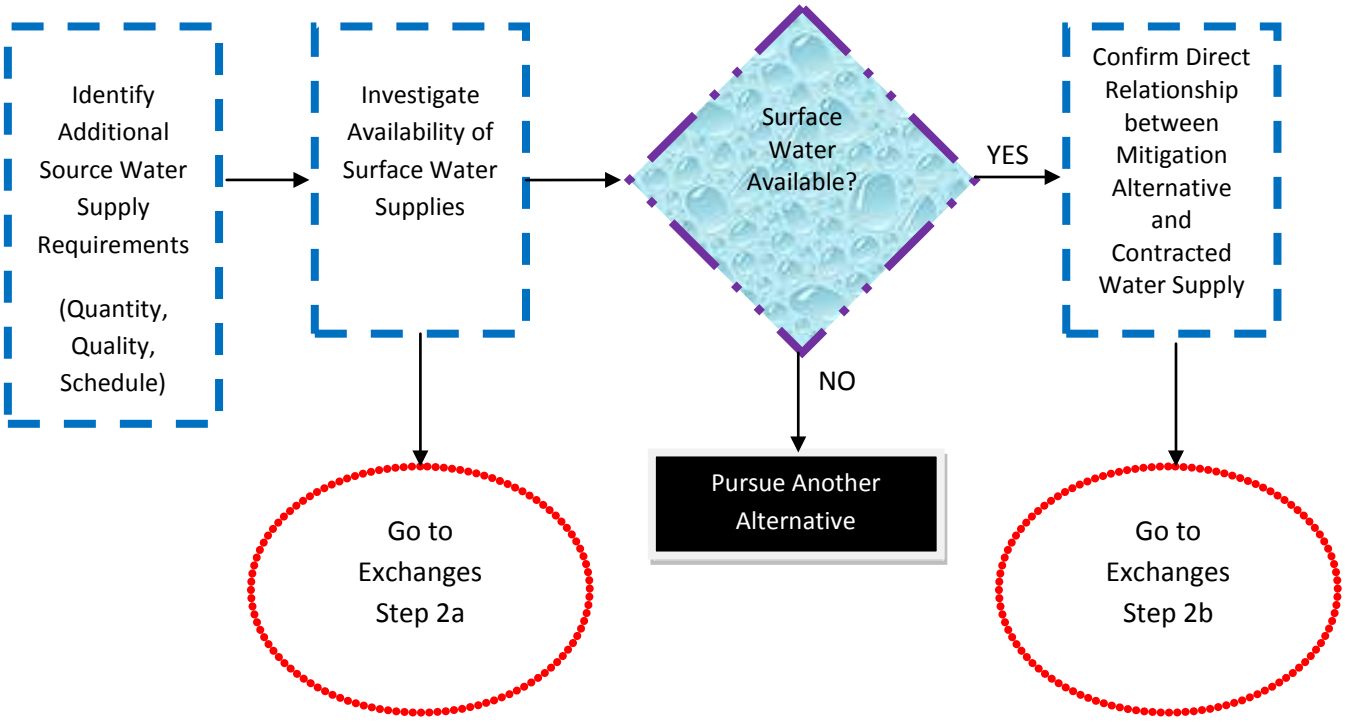
(CLIENT)

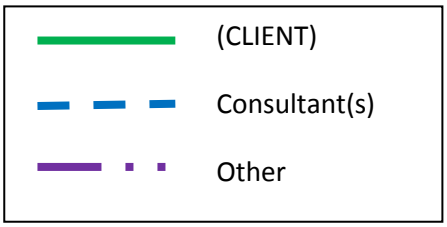


(CLIENT)

Exchanges/Contracting for Surface Water

Step One

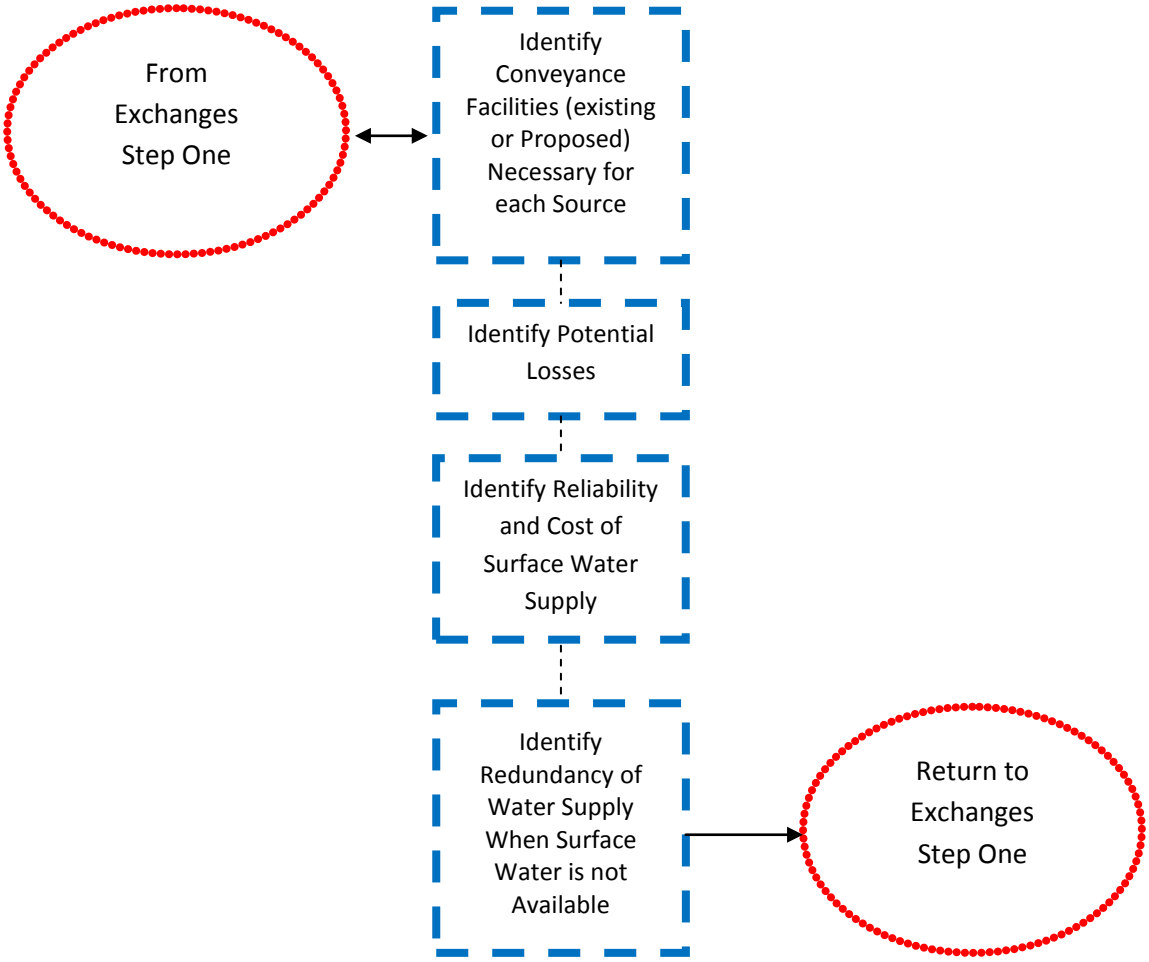


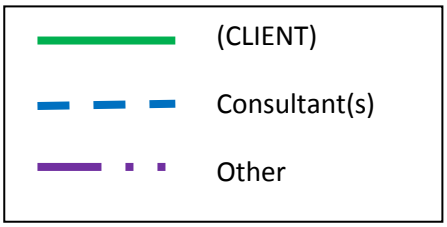


(CLIENT)

Exchanges/Contracting for Surface Water

Step Two a

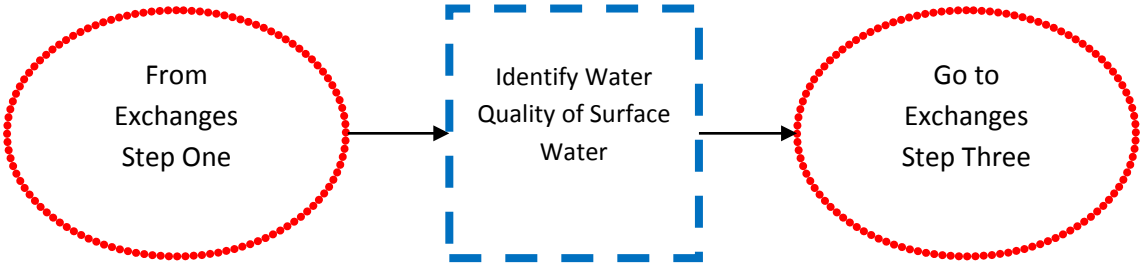


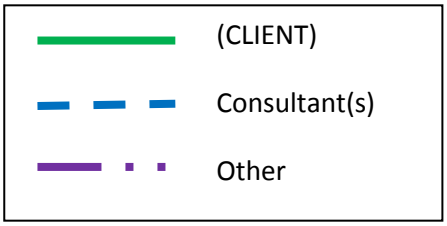


(CLIENT)

Exchanges/Contracting for Surface Water

Step Two b

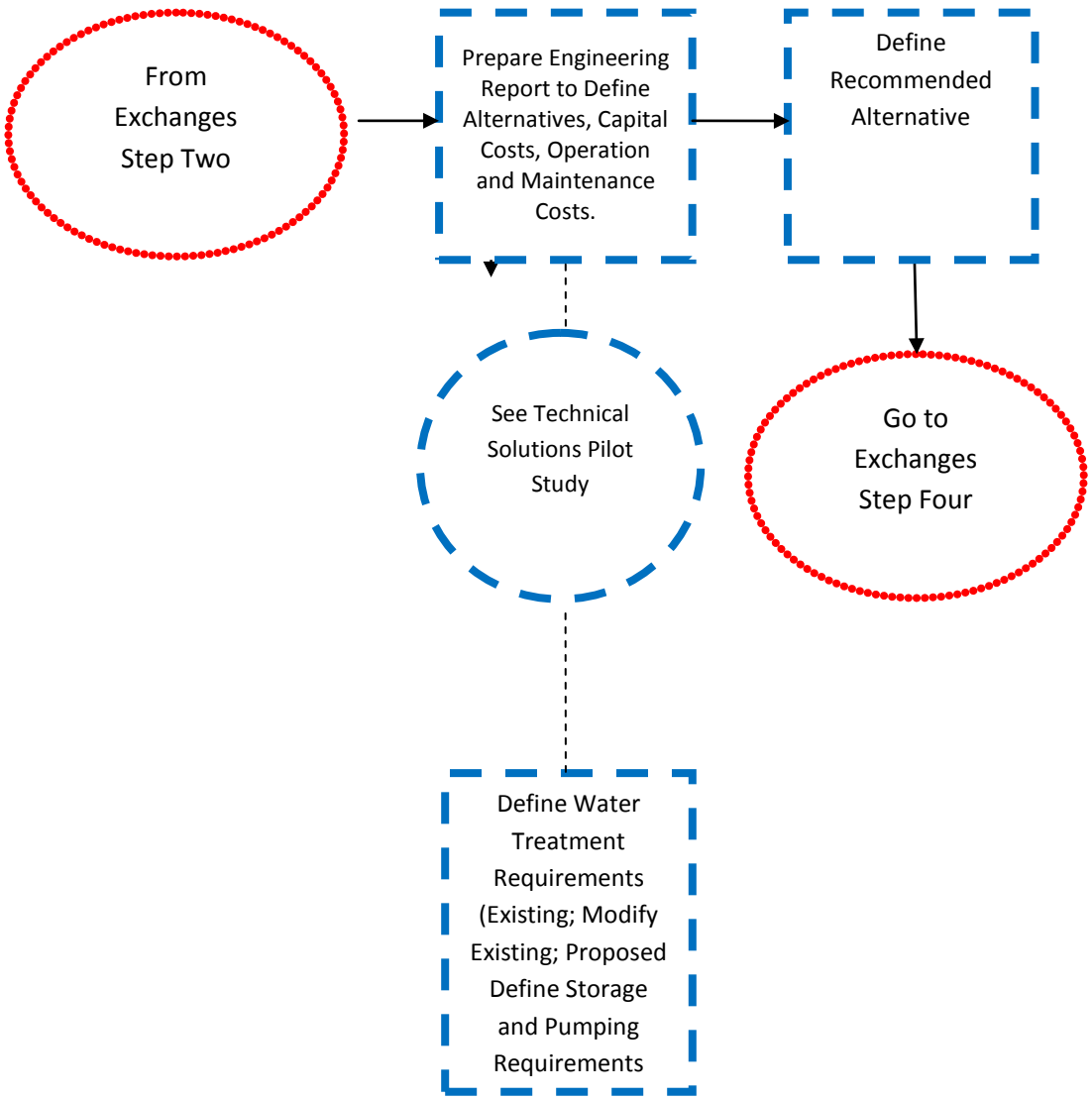


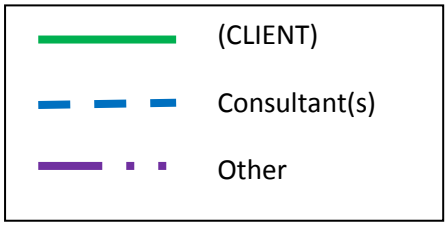


(CLIENT)

Exchanges/Contracting for Surface Water

Step Three

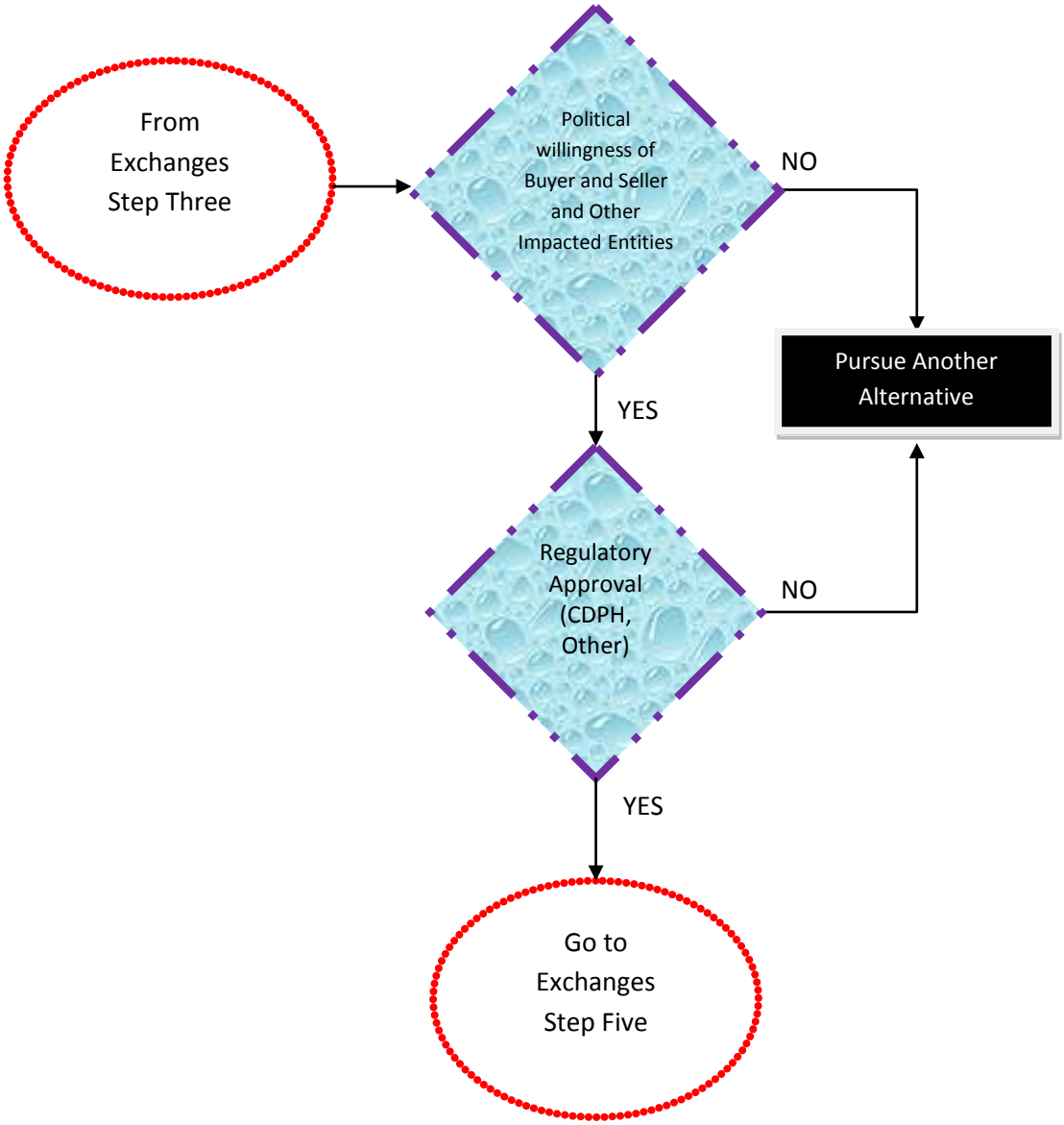


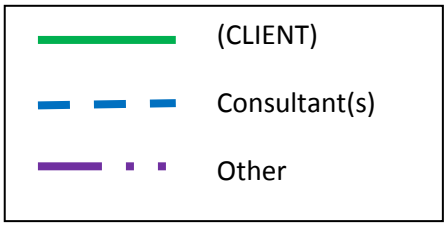


(CLIENT)

Exchanges/Contracting for Surface Water

Step Four

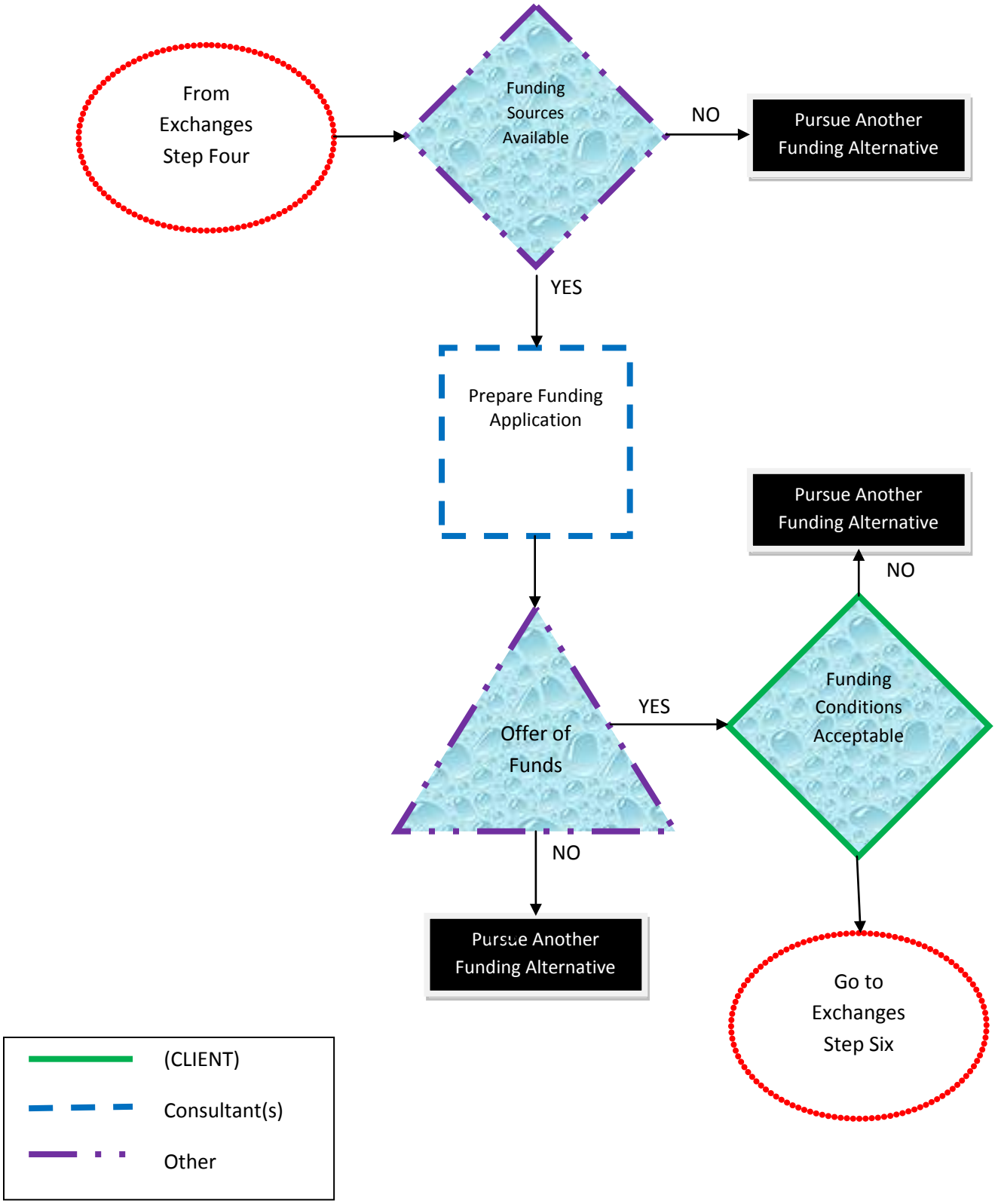




(CLIENT)

Exchanges/Contracting for Surface Water

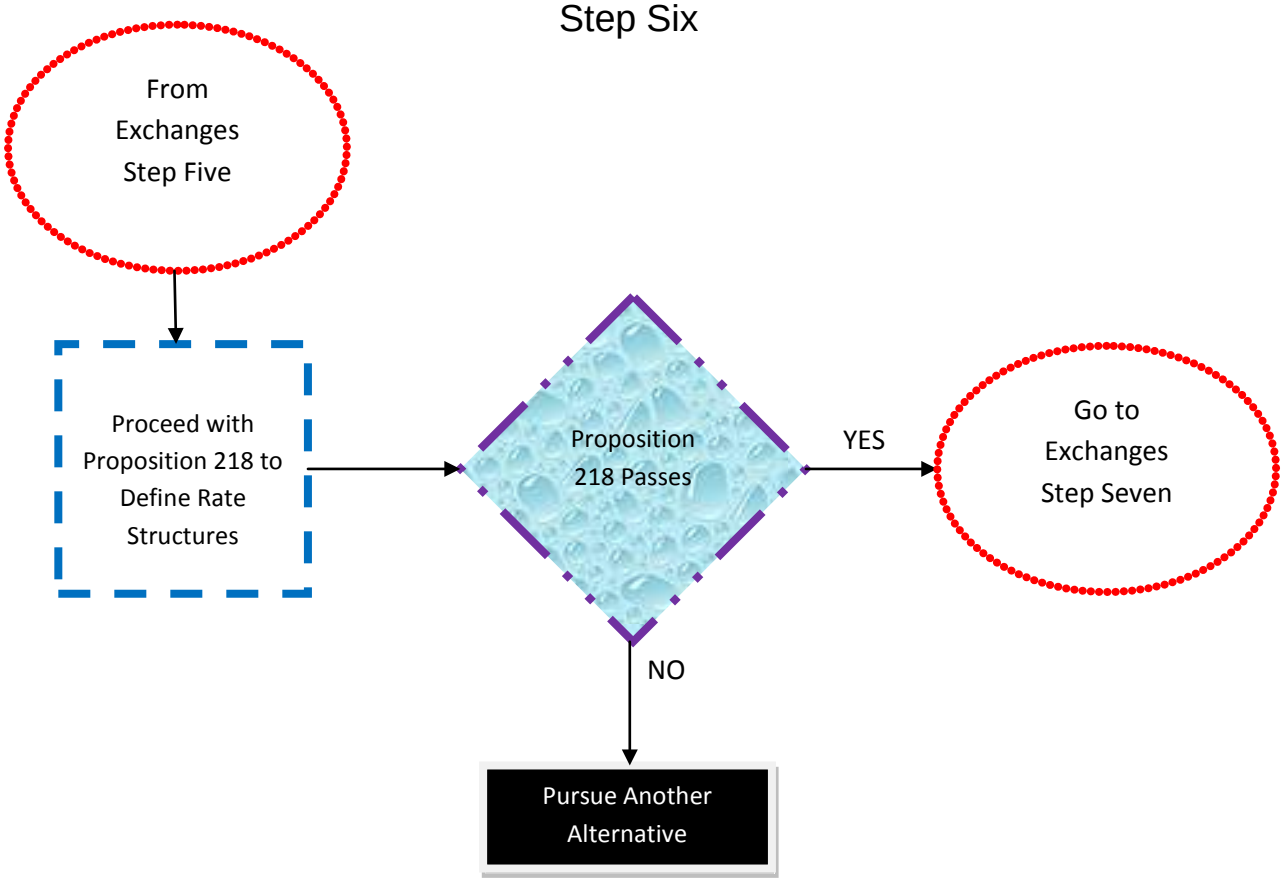
Step Five

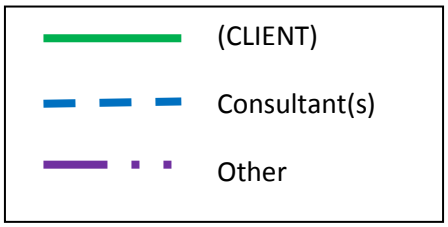


(CLIENT)

Exchanges/Contracting for Surface Water

Step Six

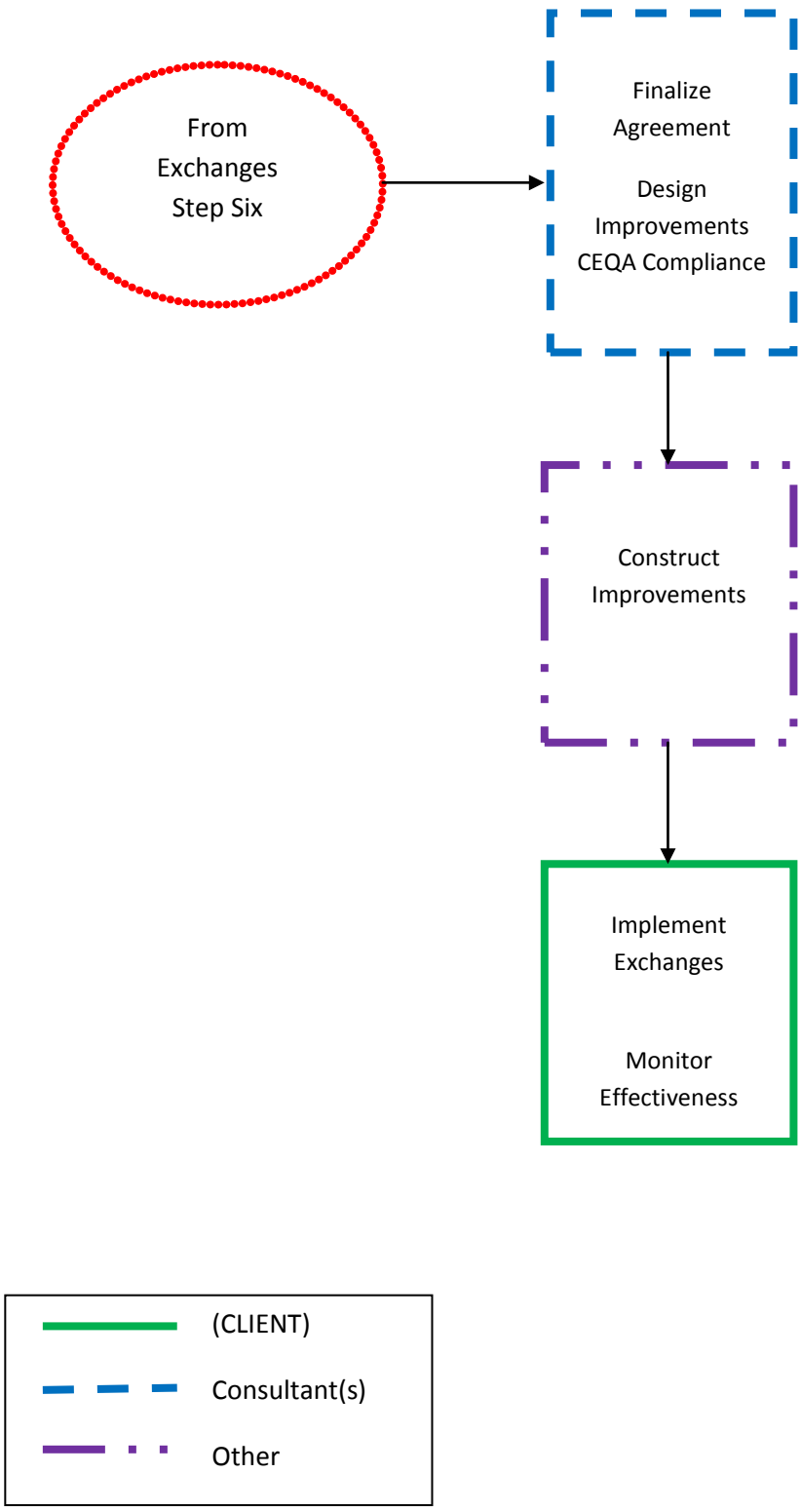


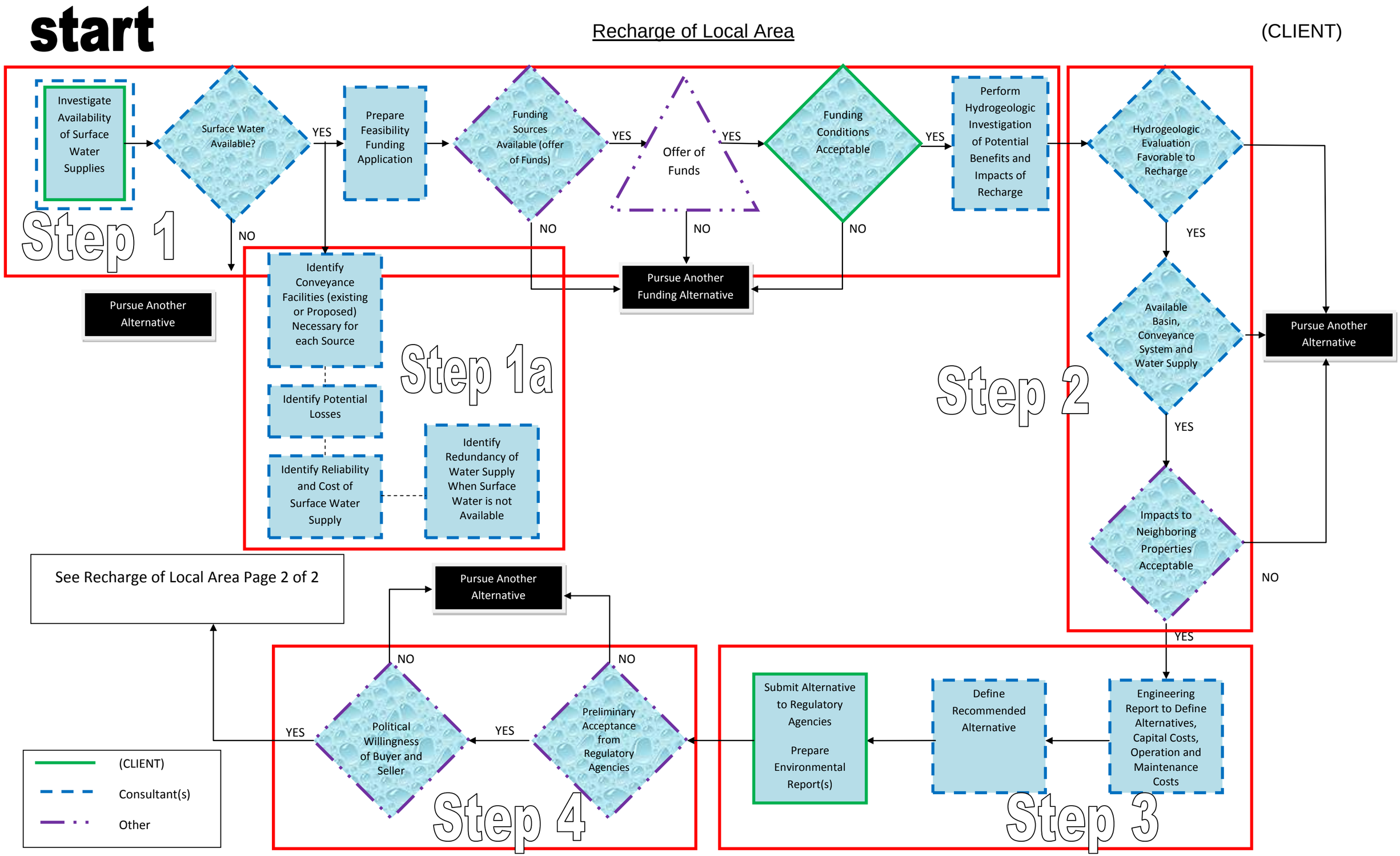


(CLIENT)

Exchanges/Contracting for Surface Water

Step Seven

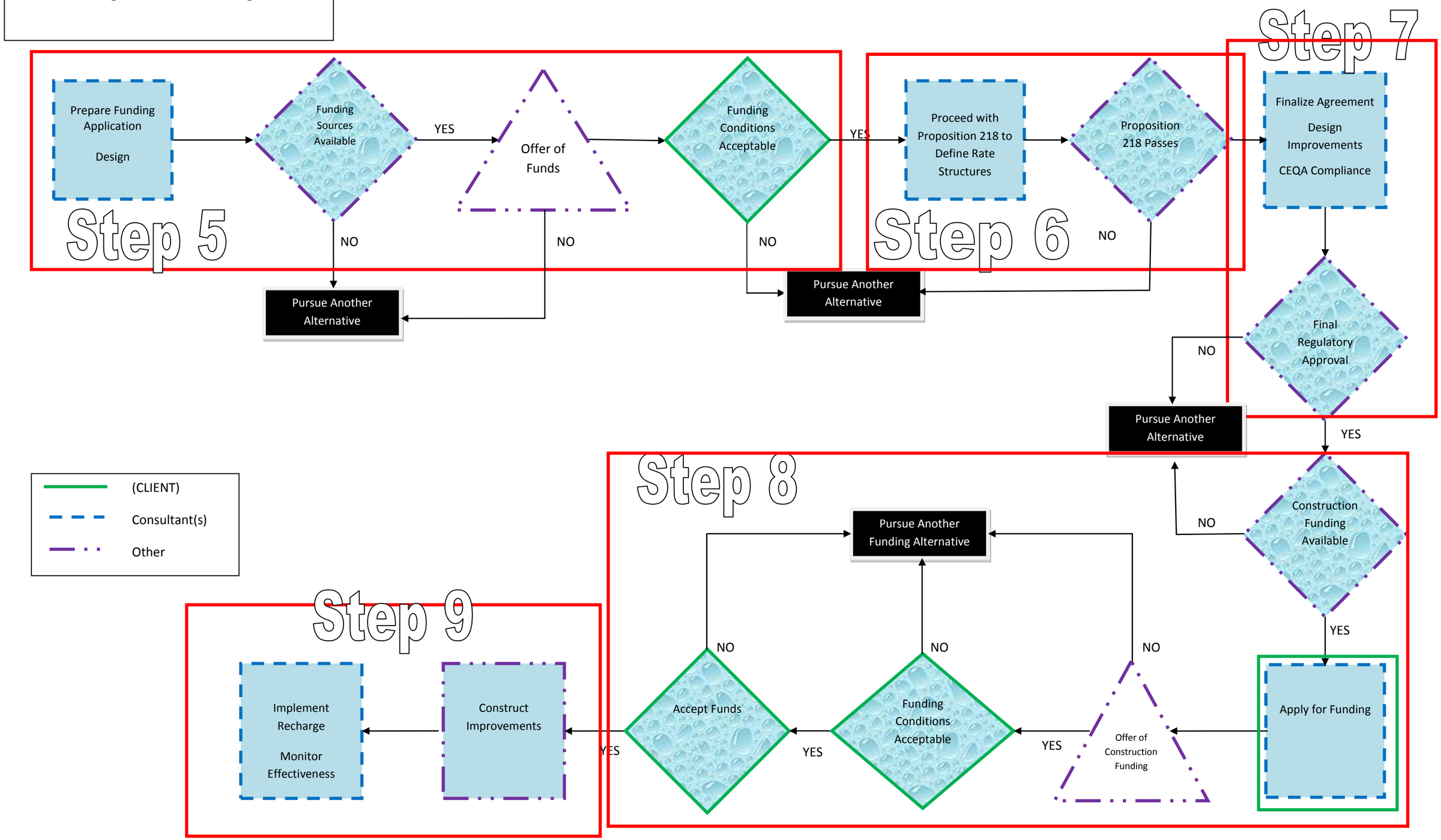



start
Recharge of Local Area
(CLIENT)
Investigate Availability of Surface Water Supplies
Surface Water Available?
YES
NO
Prepare Feasibility Funding Application
Funding Sources Available (offer of Funds)
YES
NO
Offer of Funds
YES
NO
Funding Conditions Acceptable
YES
NO
Perform Hydrogeologic Investigation of Potential Benefits and Impacts of Recharge
Step 1
Pursue Another Alternative
Pursue Another Funding Alternative
Identify Conveyance Facilities (existing or Proposed) Necessary for each Source
Identify Potential Losses
Identify Reliability and Cost of Surface Water Supply
Identify Redundancy of Water Supply When Surface Water is not Available
Step 1a
Hydrogeologic Evaluation Favorable to Recharge
YES
Available Basin, Conveyance System and Water Supply
YES
Impacts to Neighboring Properties Acceptable
NO
YES
Pursue Another Alternative
Step 2
Engineering Report to Define Alternatives, Capital Costs, Operation and Maintenance Costs
Define Recommended Alternative
Submit Alternative to Regulatory Agencies
Prepare Environmental Report(s)
Step 3
Preliminary Acceptance from Regulatory Agencies
NO
YES
Political Willingness of Buyer and Seller
NO
YES
Pursue Another Alternative
Step 4
See Recharge of Local Area Page 2 of 2
(CLIENT)
Consultant(s)
Other

Recharge of Local Area

(CLIENT)

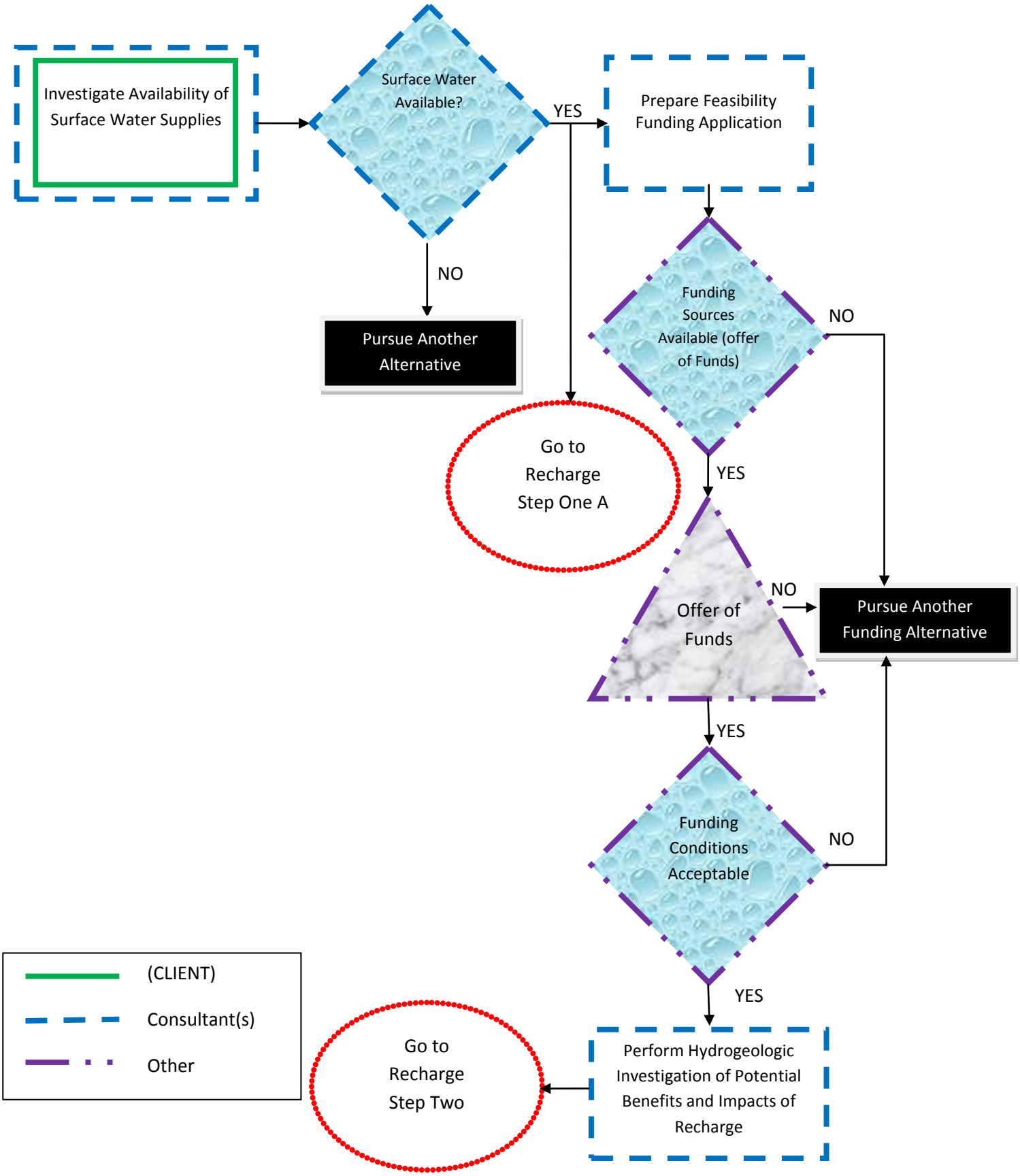
See Recharge of Local Area Page 1 of 2



(CLIENT)

Recharge of Local Area

Step One



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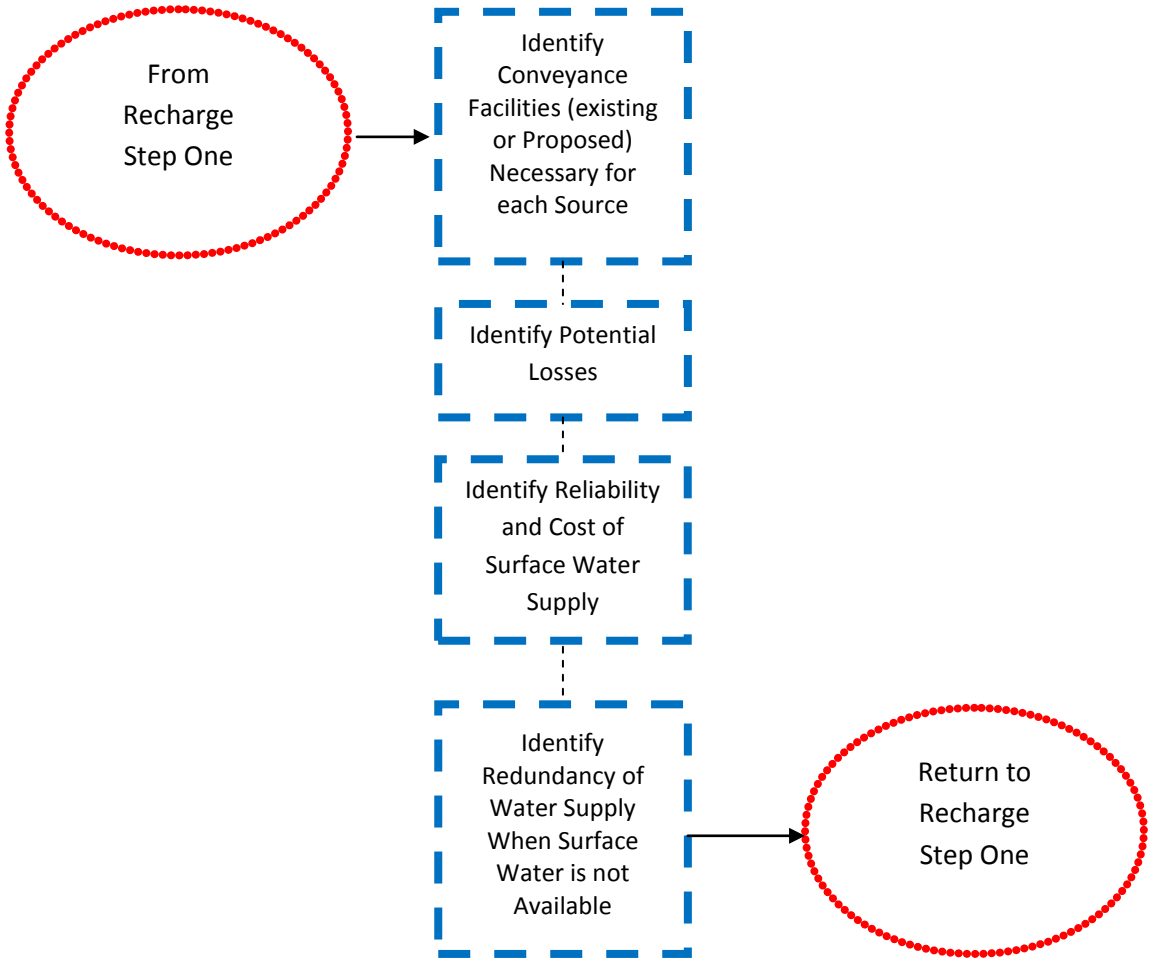
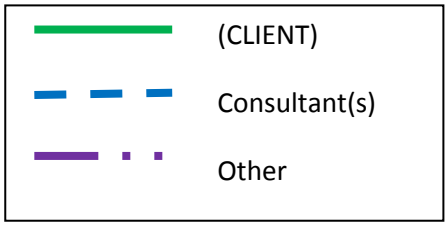
Recharge of Local Area

Step 1A

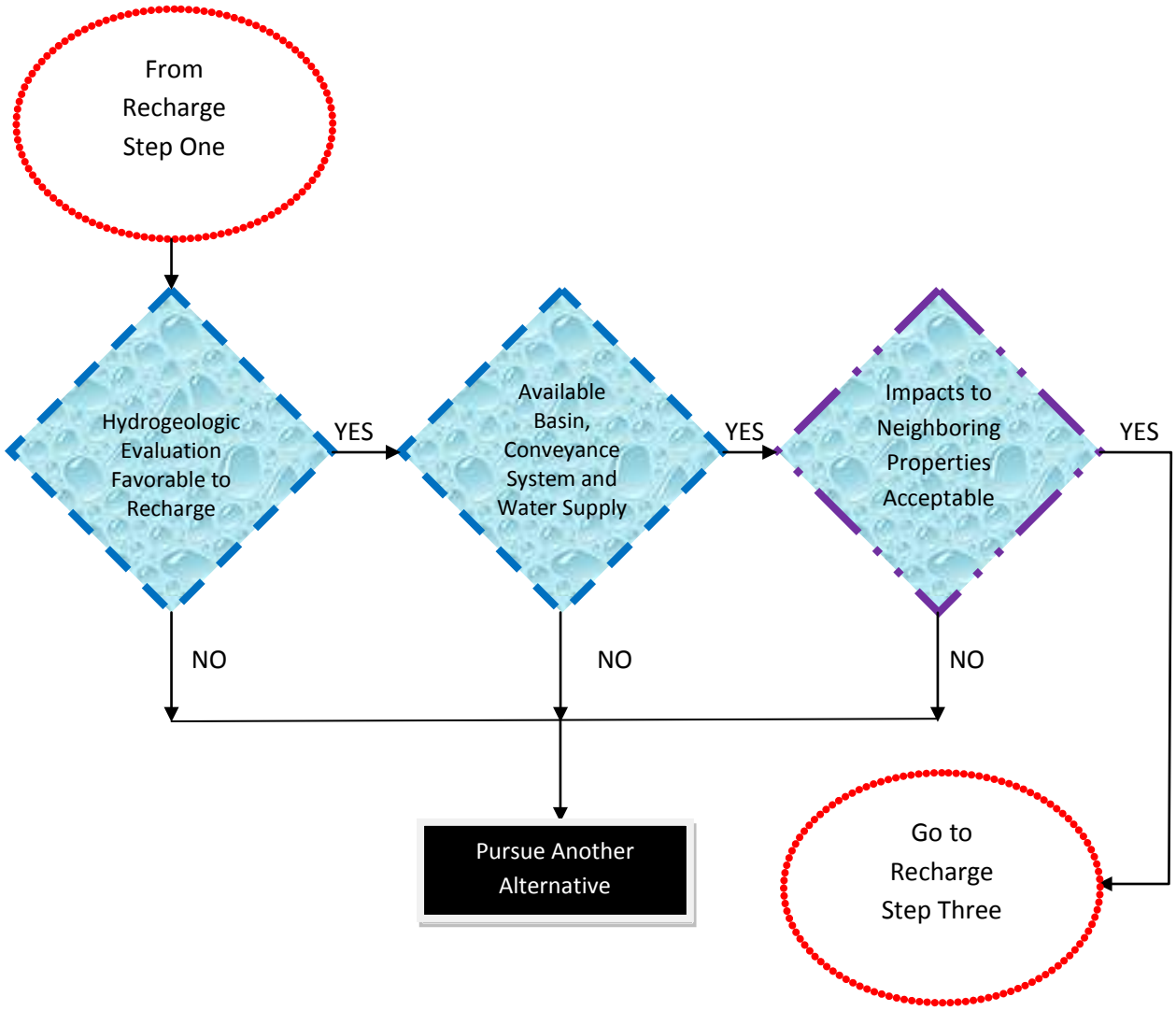


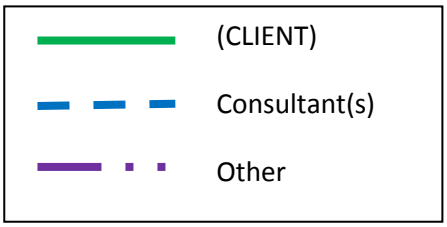


(CLIENT)

Recharge of Local Area

Step Two

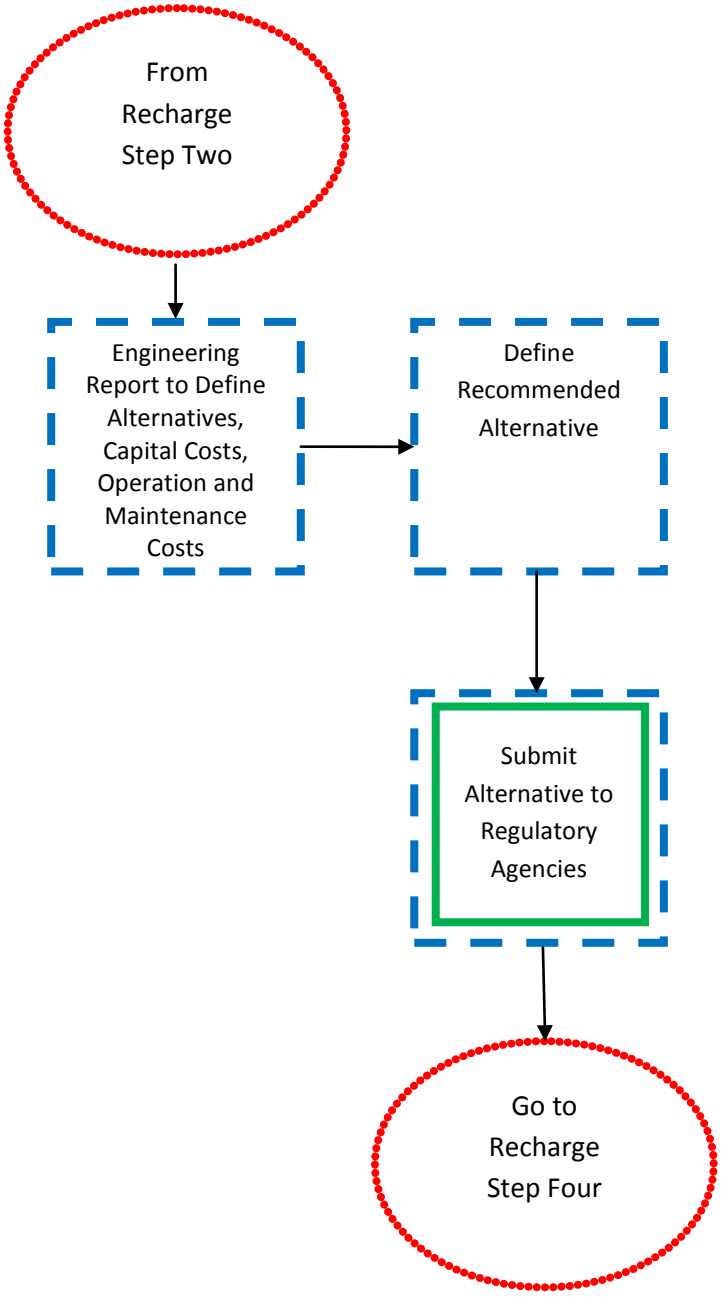


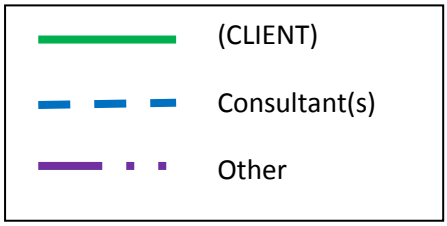


(CLIENT)

Recharge of Local Area

Step Three

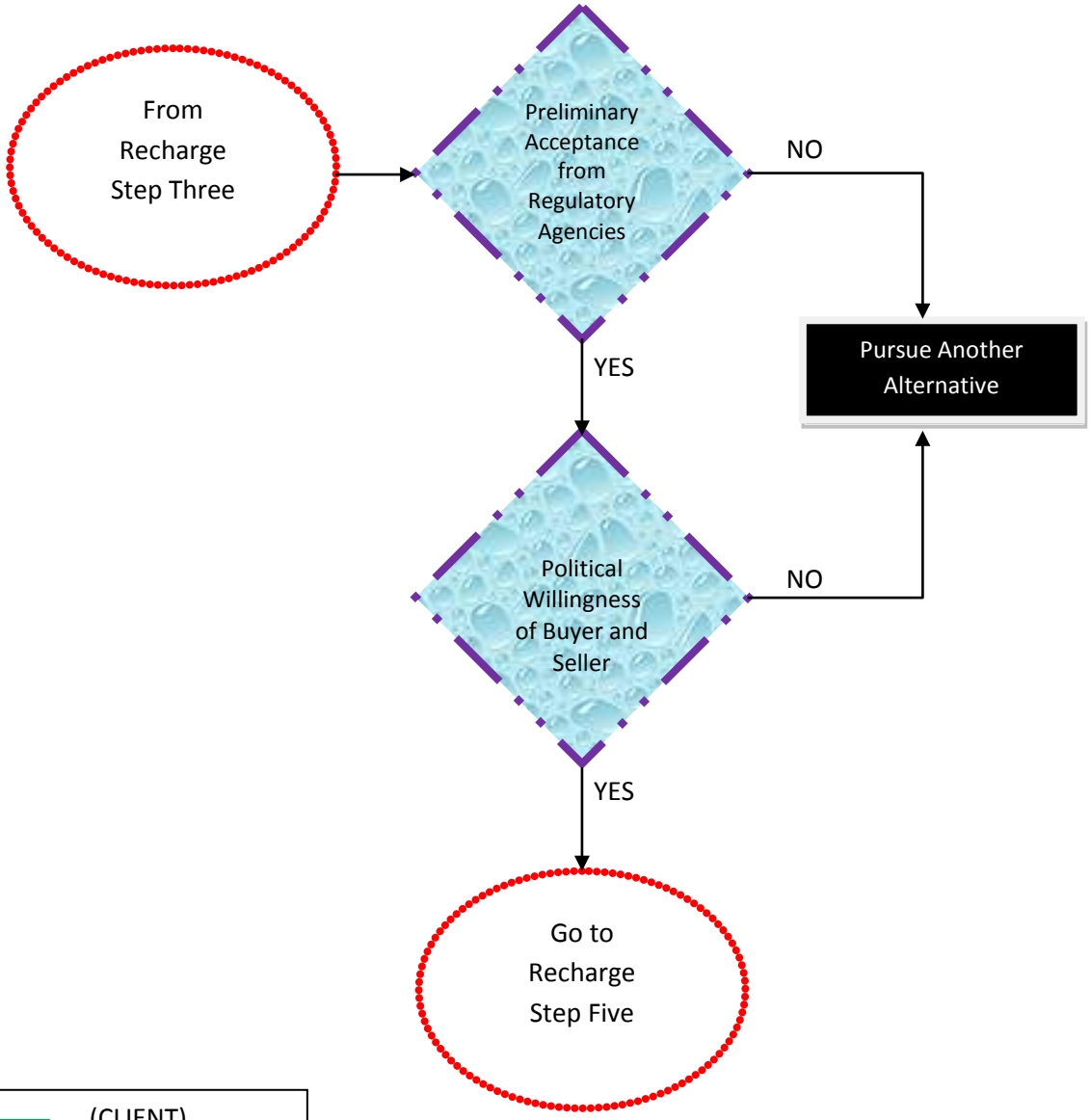


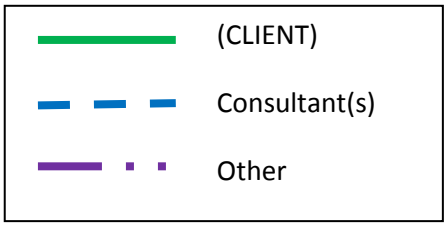


(CLIENT)

Recharge of Local Area

Step Four

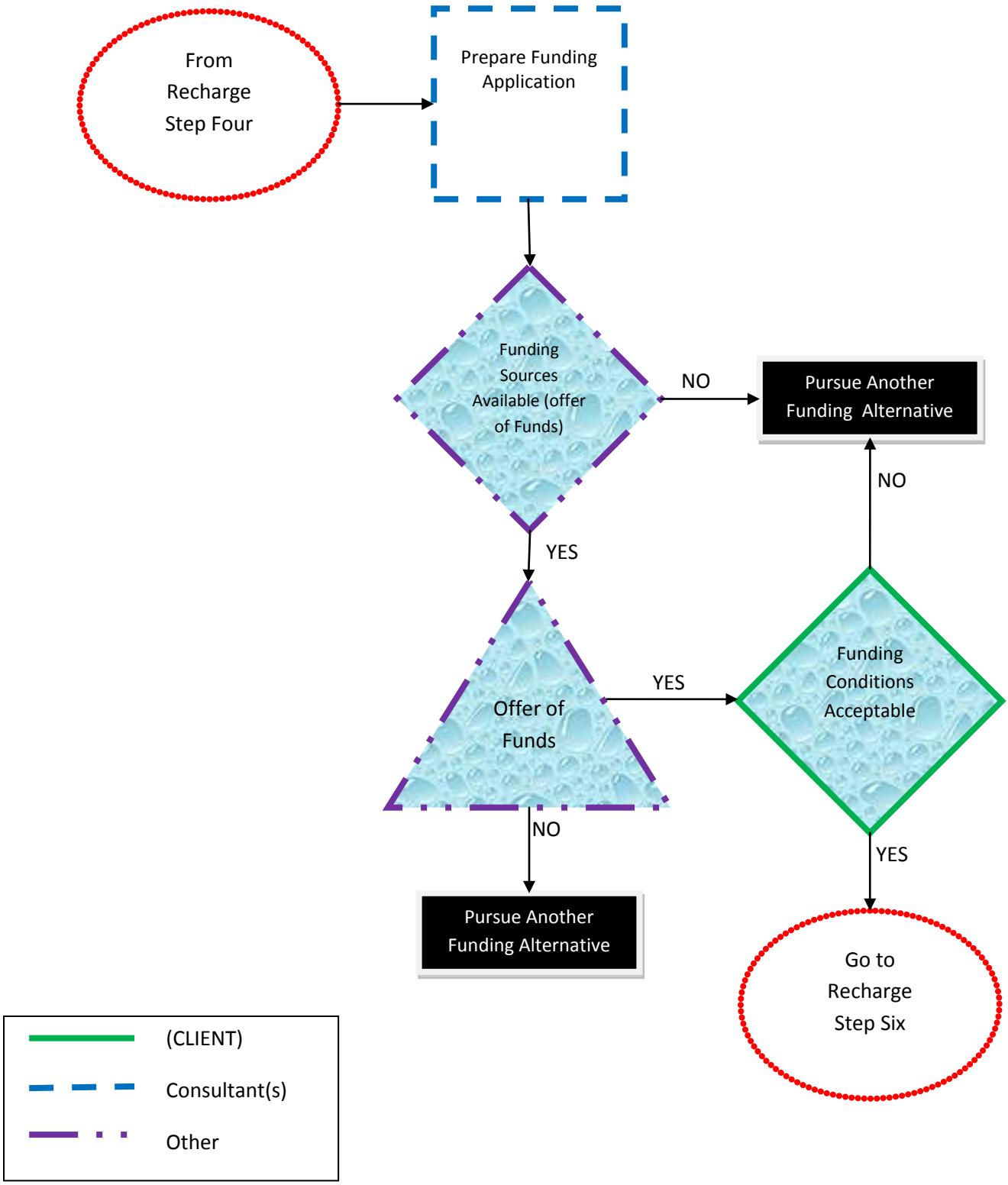




(CLIENT)

Recharge of Local Area

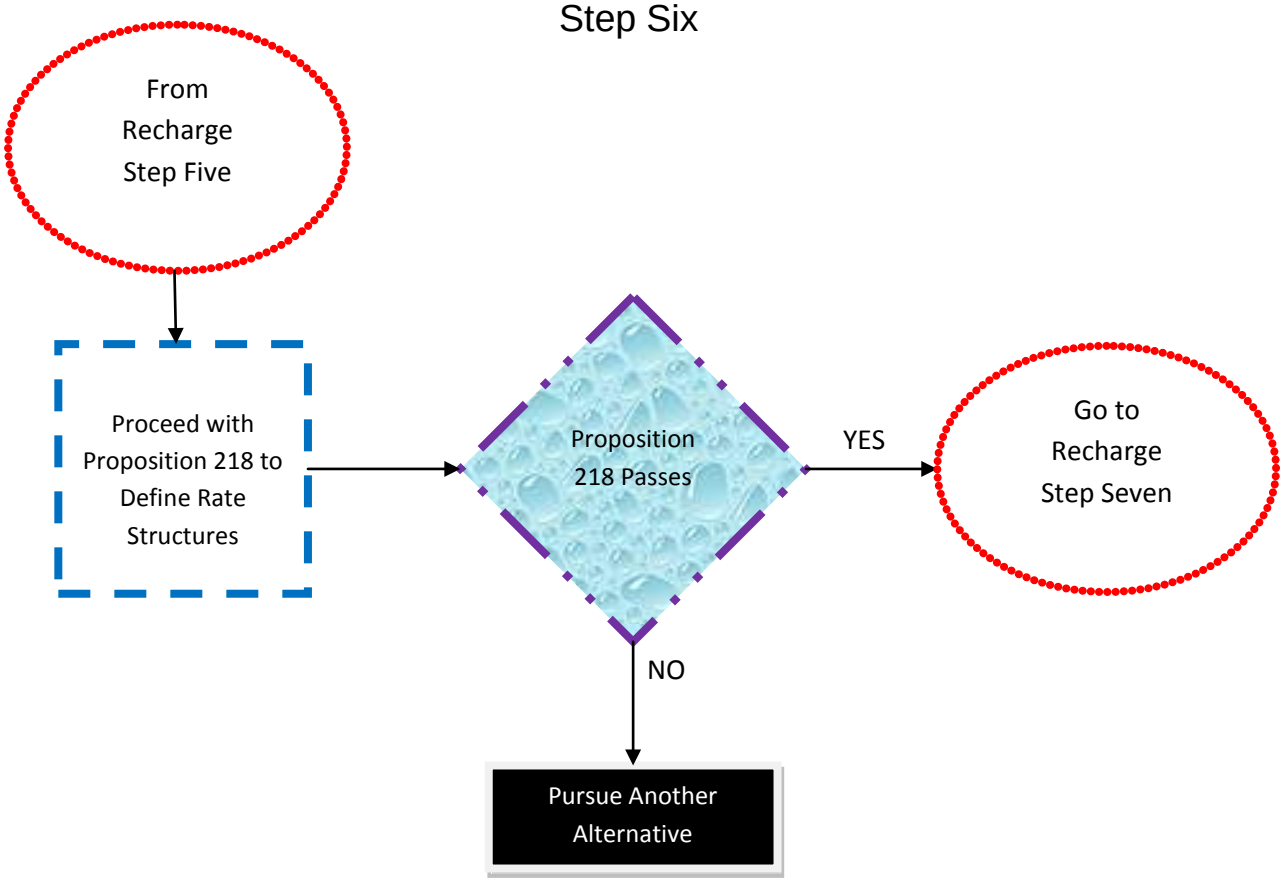
Step Five

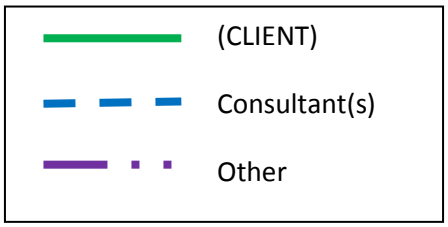


(CLIENT)

Recharge of Local Area

Step Six

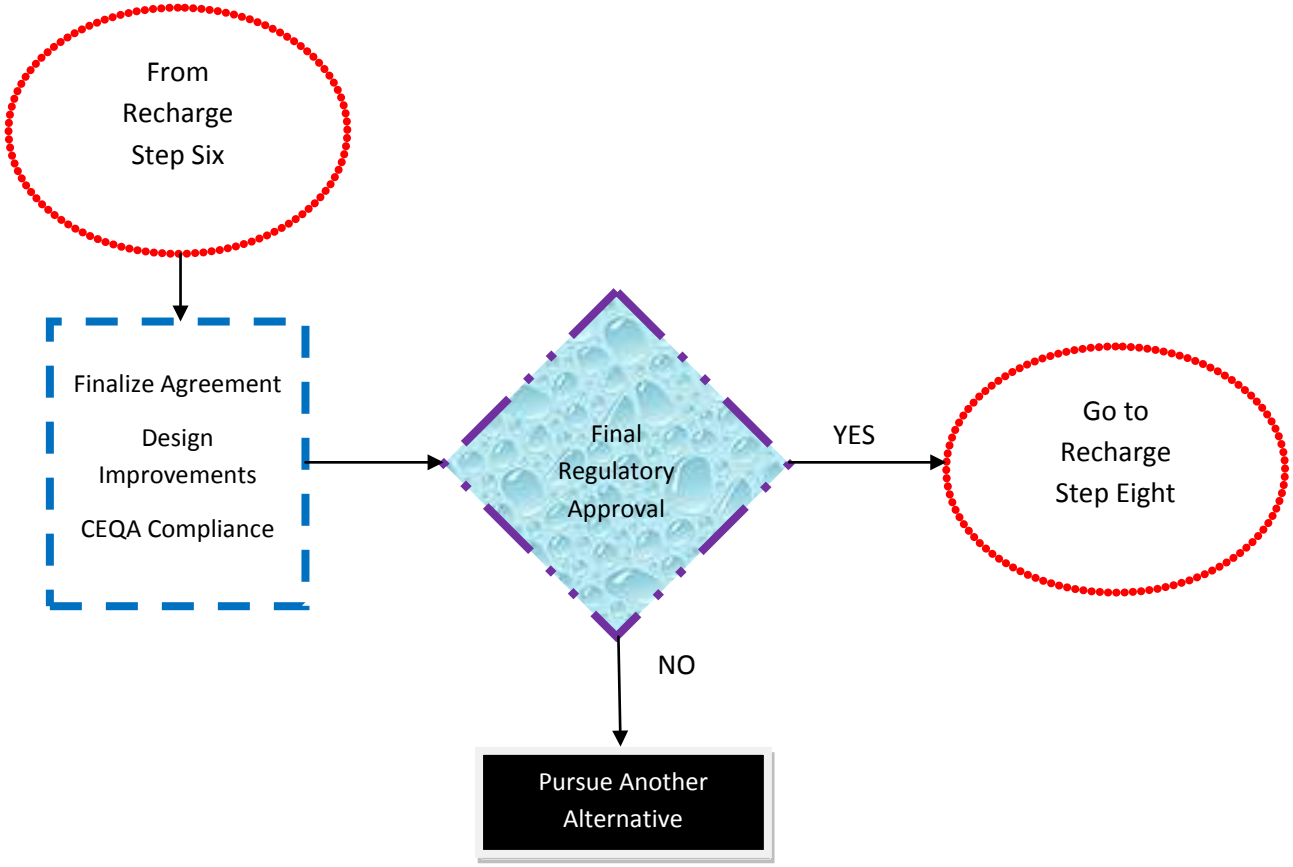


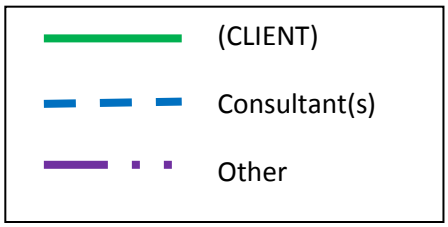


(CLIENT)

Recharge of Local Area

Step Seven

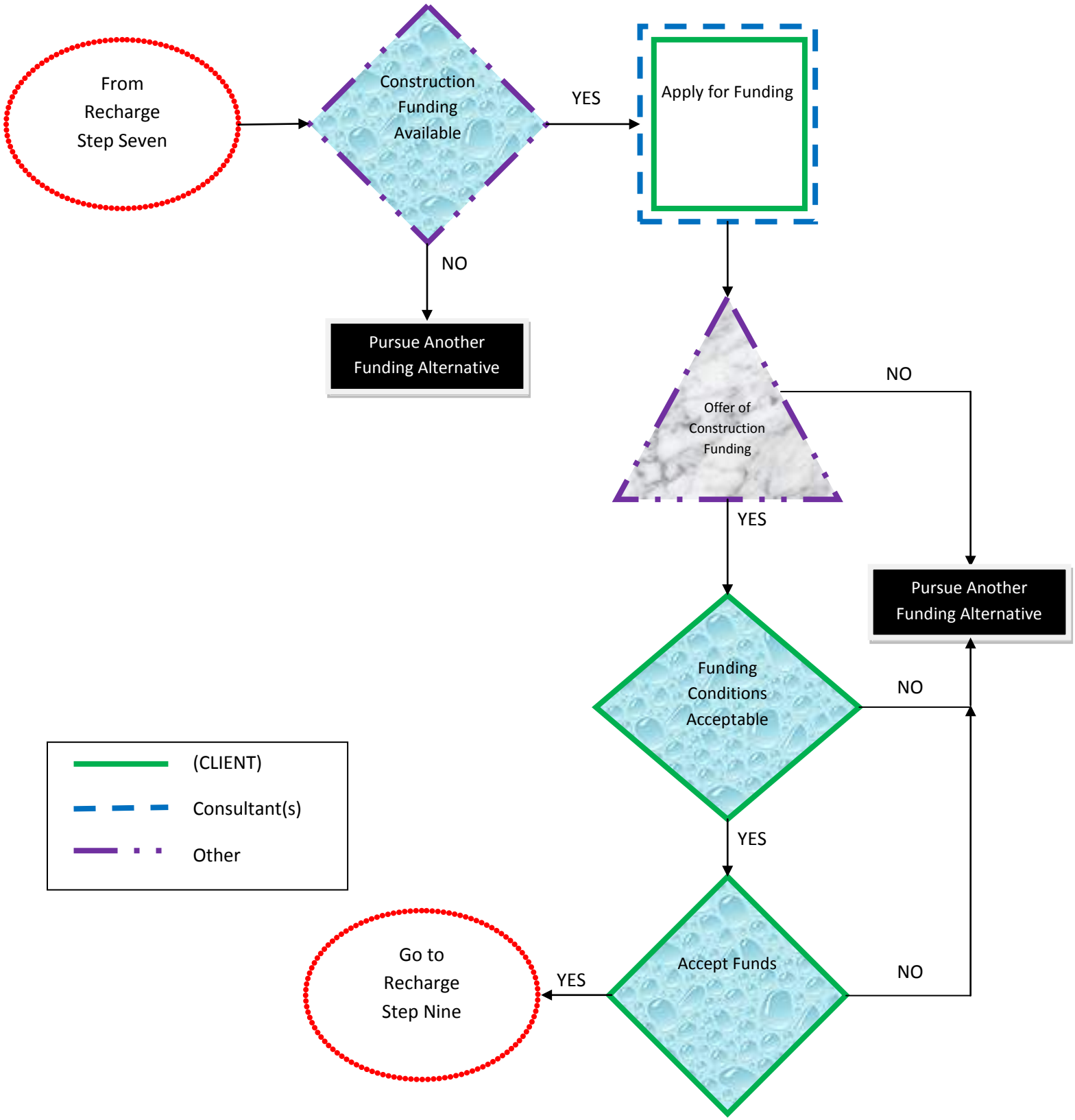




(CLIENT)

Recharge of Local Area

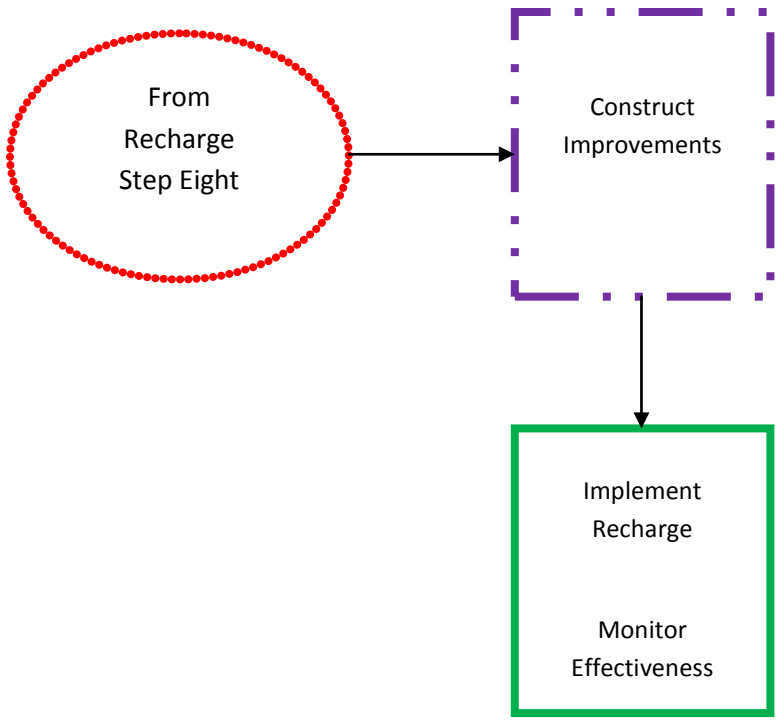
Step Eight

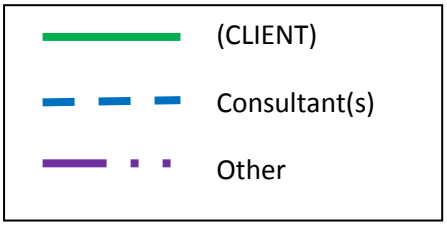


(CLIENT)

Recharge of Local Area

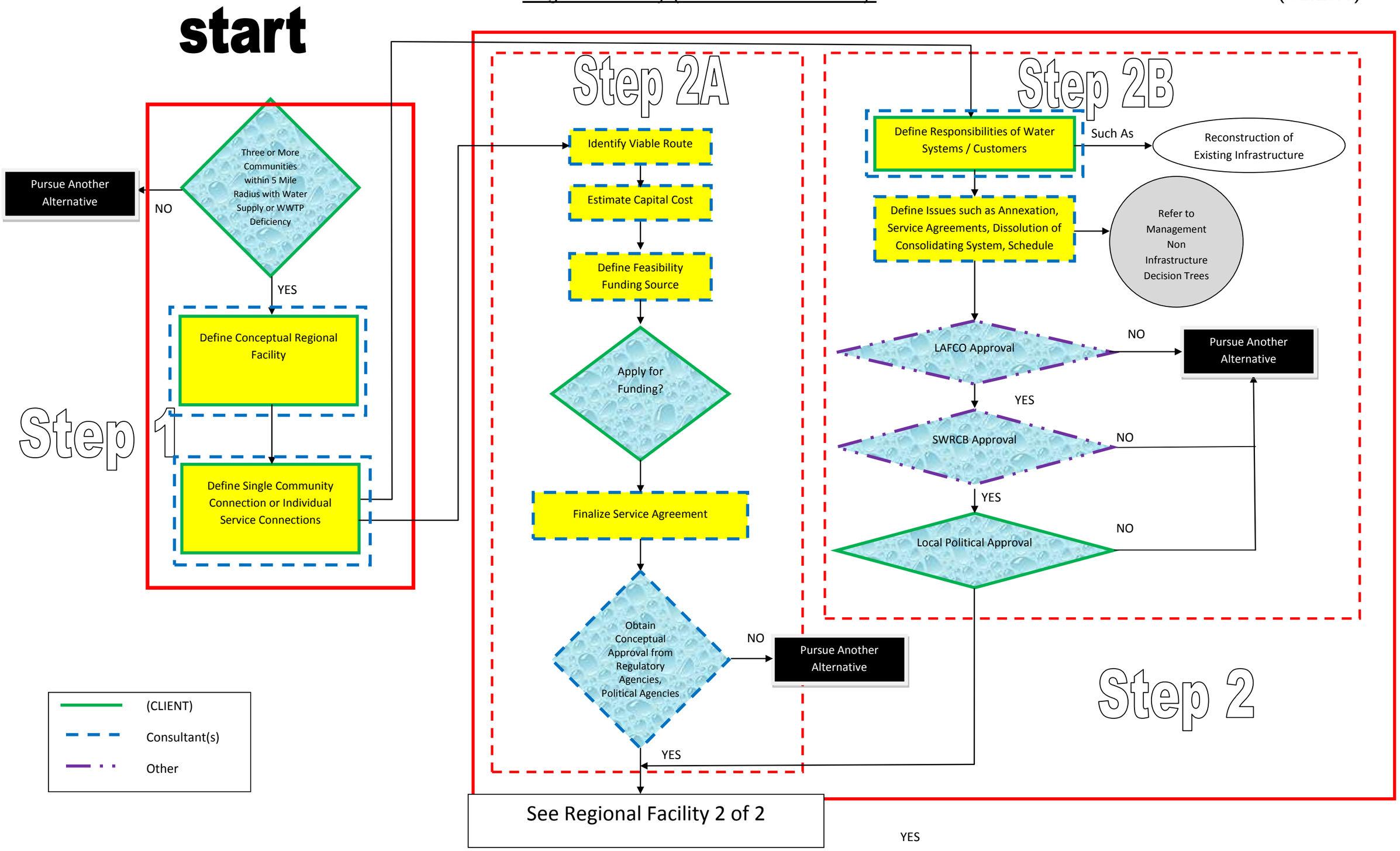
Step Nine

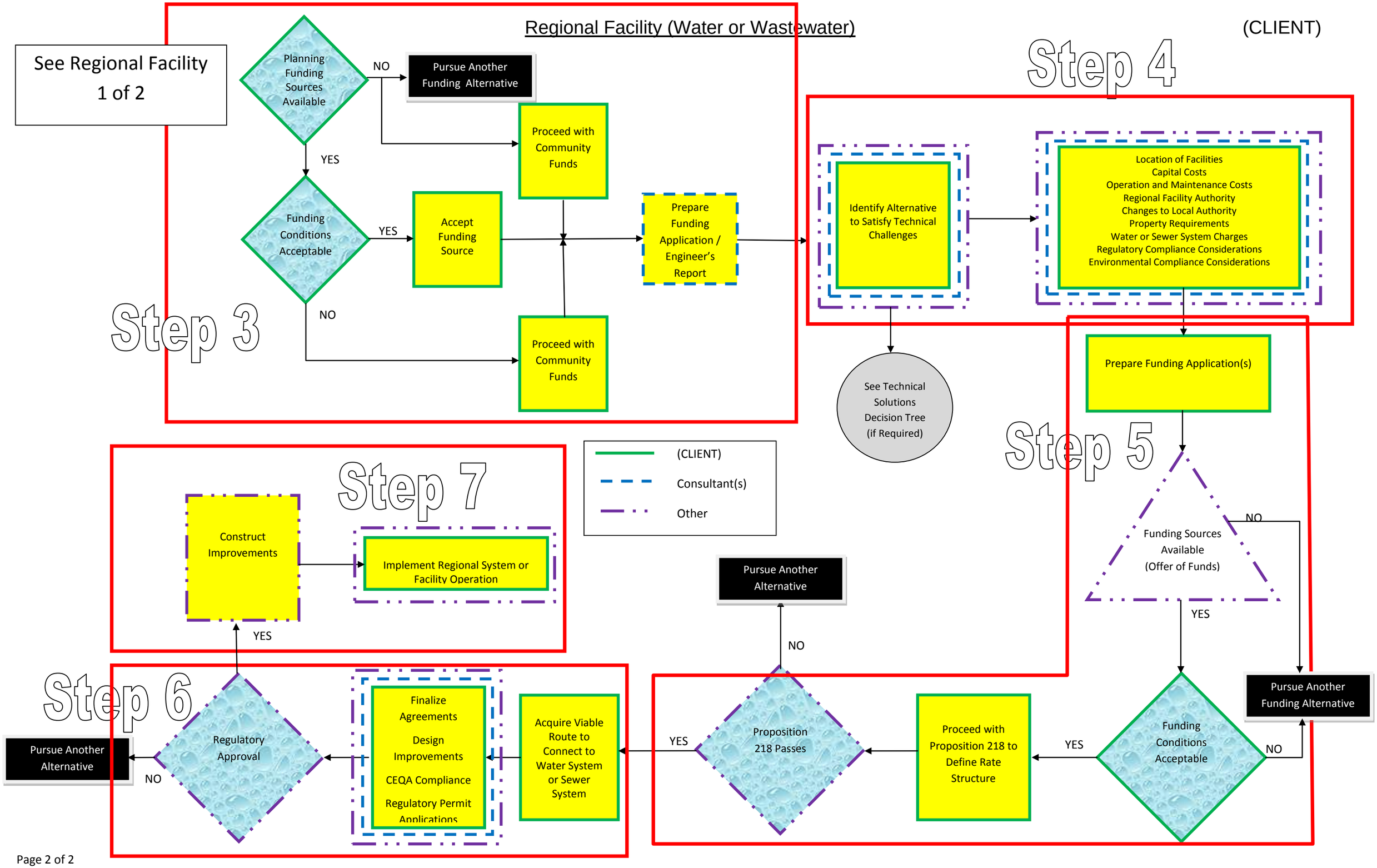




Regional Facility (Water or Wastewater)

(CLIENT)

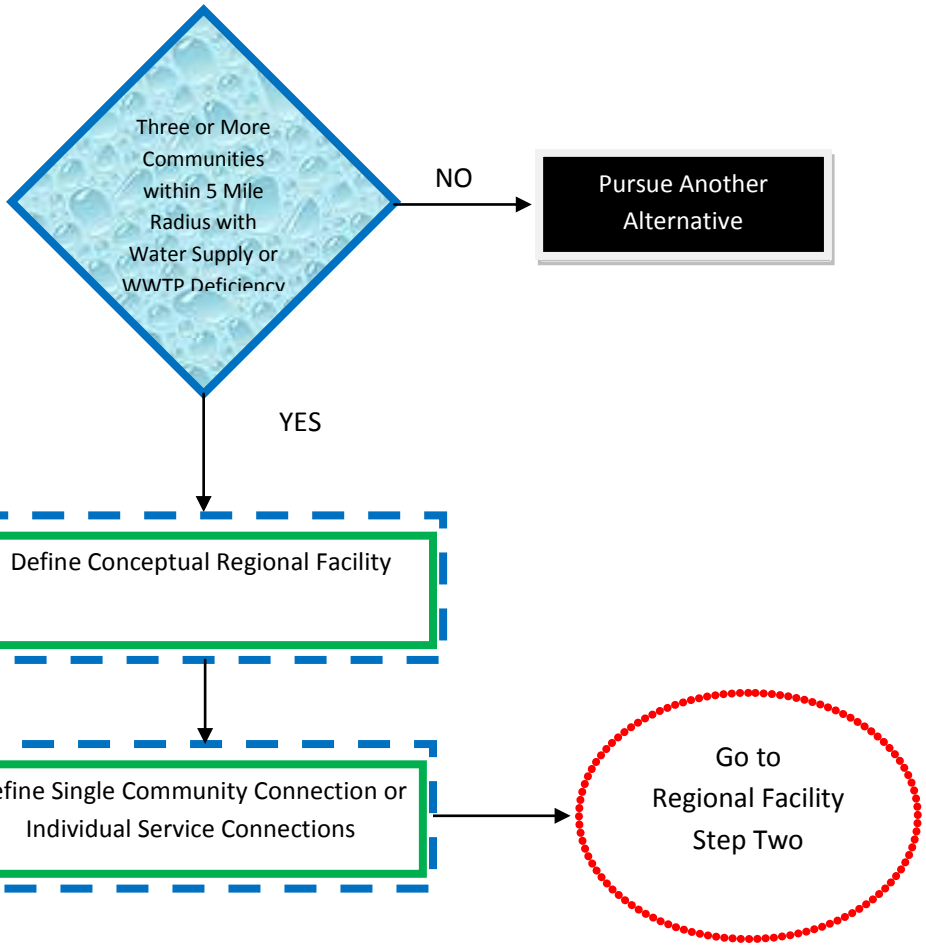


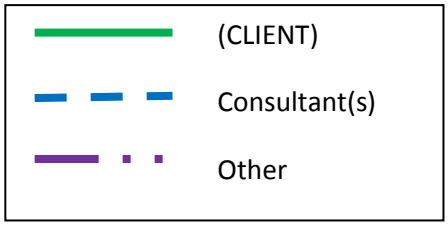

See Regional Facility
1 of 2
Regional Facility (Water or Wastewater)
(CLIENT)
Step 3
Planning Funding Sources Available
NO
Pursue Another Funding Alternative
YES
Proceed with Community Funds
Funding Conditions Acceptable
YES
Accept Funding Source
Prepare Funding Application / Engineer's Report
NO
Proceed with Community Funds
Step 4
Identify Alternative to Satisfy Technical Challenges
Location of Facilities
Capital Costs
Operation and Maintenance Costs
Regional Facility Authority
Changes to Local Authority
Property Requirements
Water or Sewer System Charges
Regulatory Compliance Considerations
Environmental Compliance Considerations
See Technical Solutions Decision Tree (if Required)
Step 5
Prepare Funding Application(s)
Funding Sources Available (Offer of Funds)
NO
YES
Funding Conditions Acceptable
YES
NO
Pursue Another Funding Alternative
Proceed with Proposition 218 to Define Rate Structure
Proposition 218 Passes
NO
Pursue Another Alternative
YES
Acquire Viable Route to Connect to Water System or Sewer System
Step 6
Finalize Agreements
Design Improvements
CEQA Compliance
Regulatory Permit Applications
Regulatory Approval
NO
Pursue Another Alternative
YES
Step 7
Construct Improvements
Implement Regional System or Facility Operation
(CLIENT)
Consultant(s)
Other

(CLIENT)

Regional Facility (Water or Wastewater)

Step One



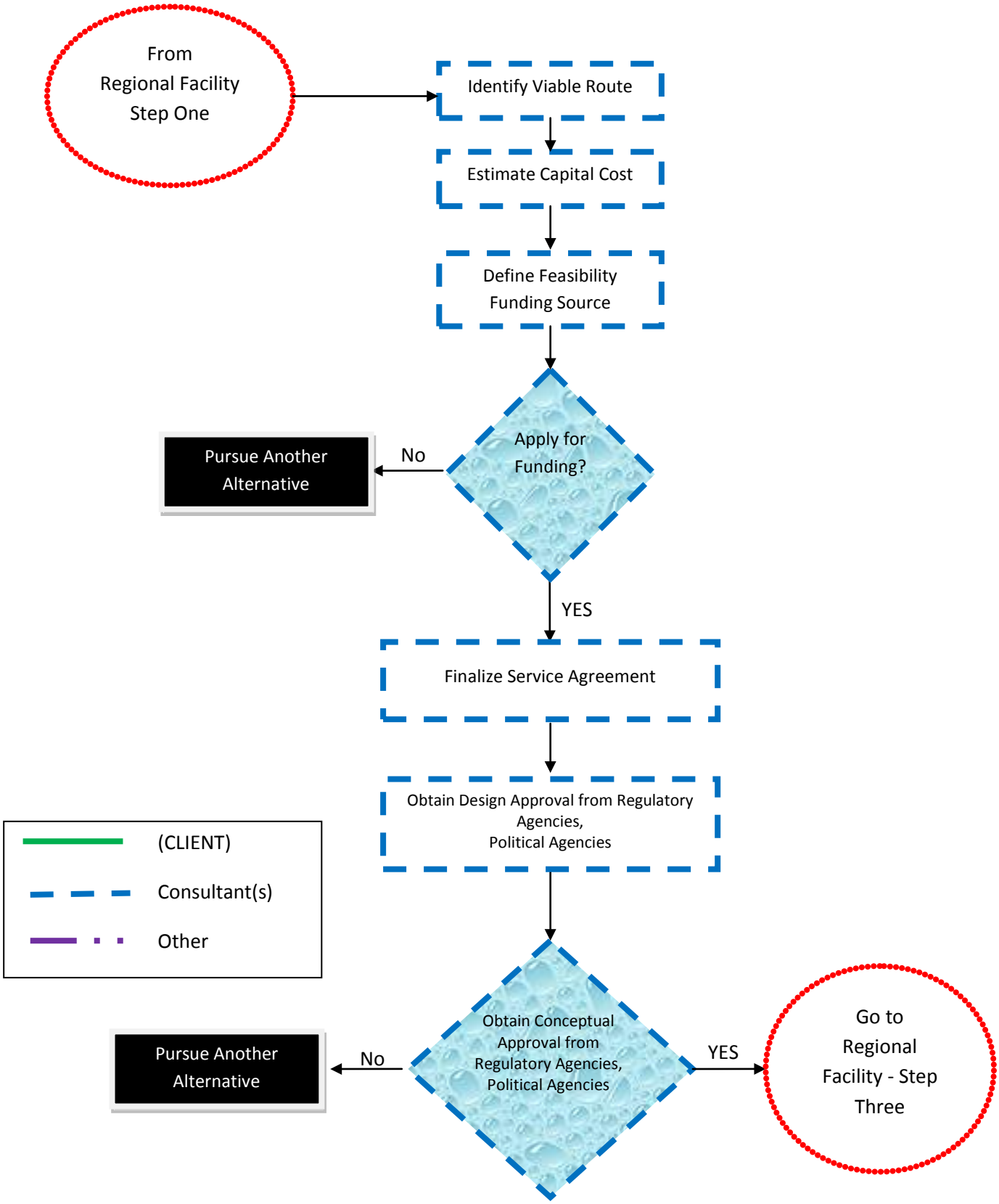


(CLIENT)

Regional Facility (Water or Wastewater)

Step Two A

(Technical)

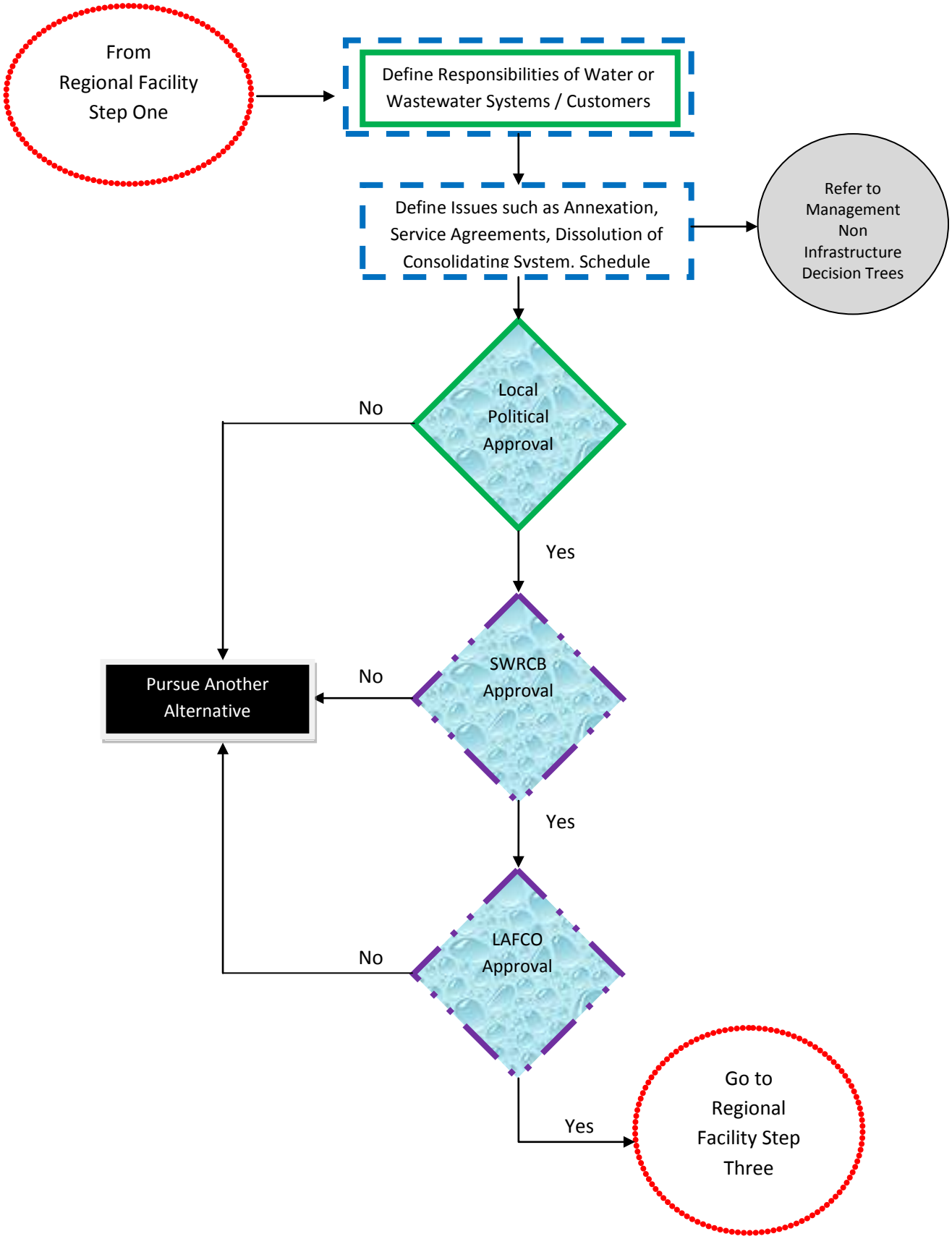


(CLIENT)

Regional Facility (Water or Wastewater)

Step Two B

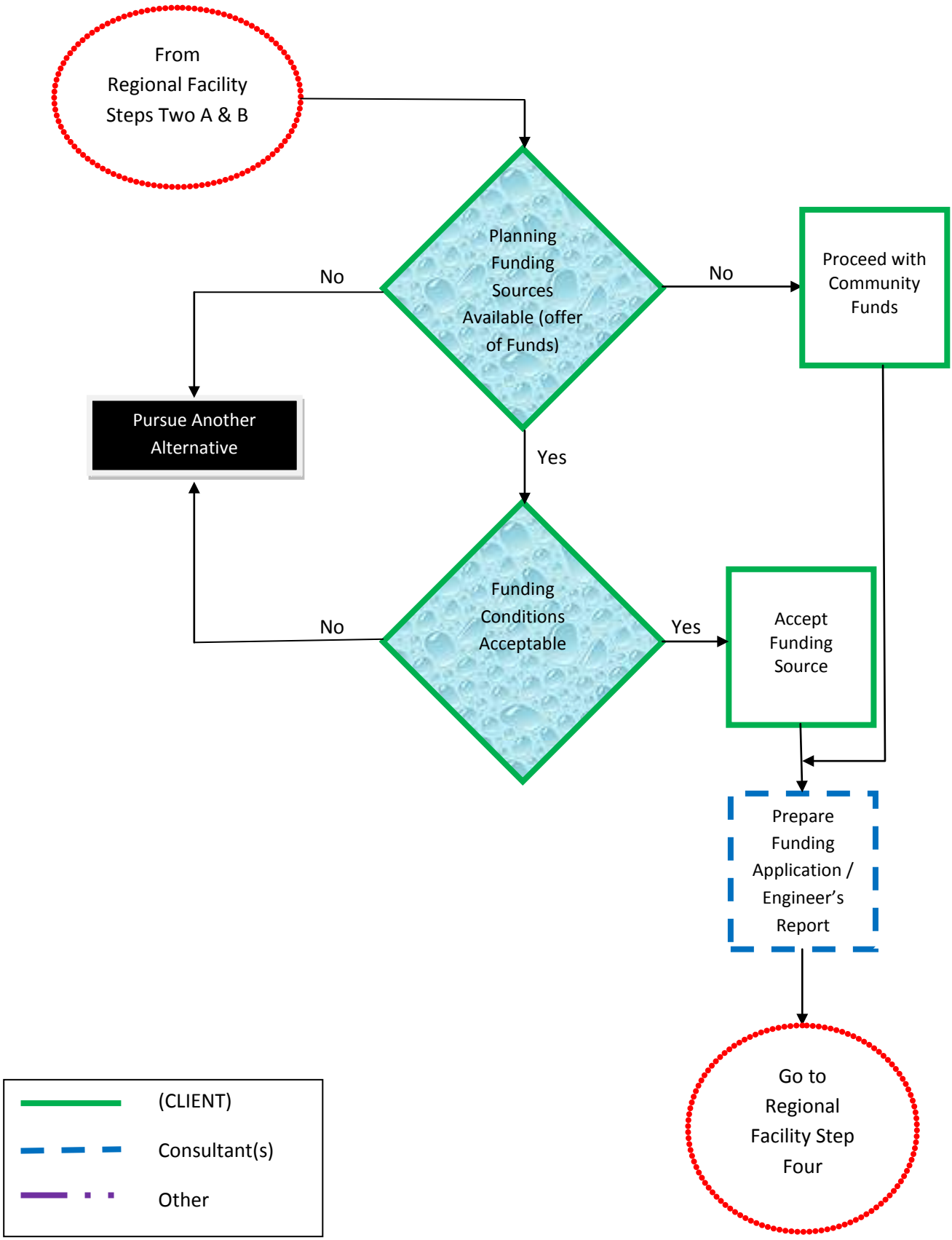
(Political)



(CLIENT)

Regional Facility (Water or Wastewater)

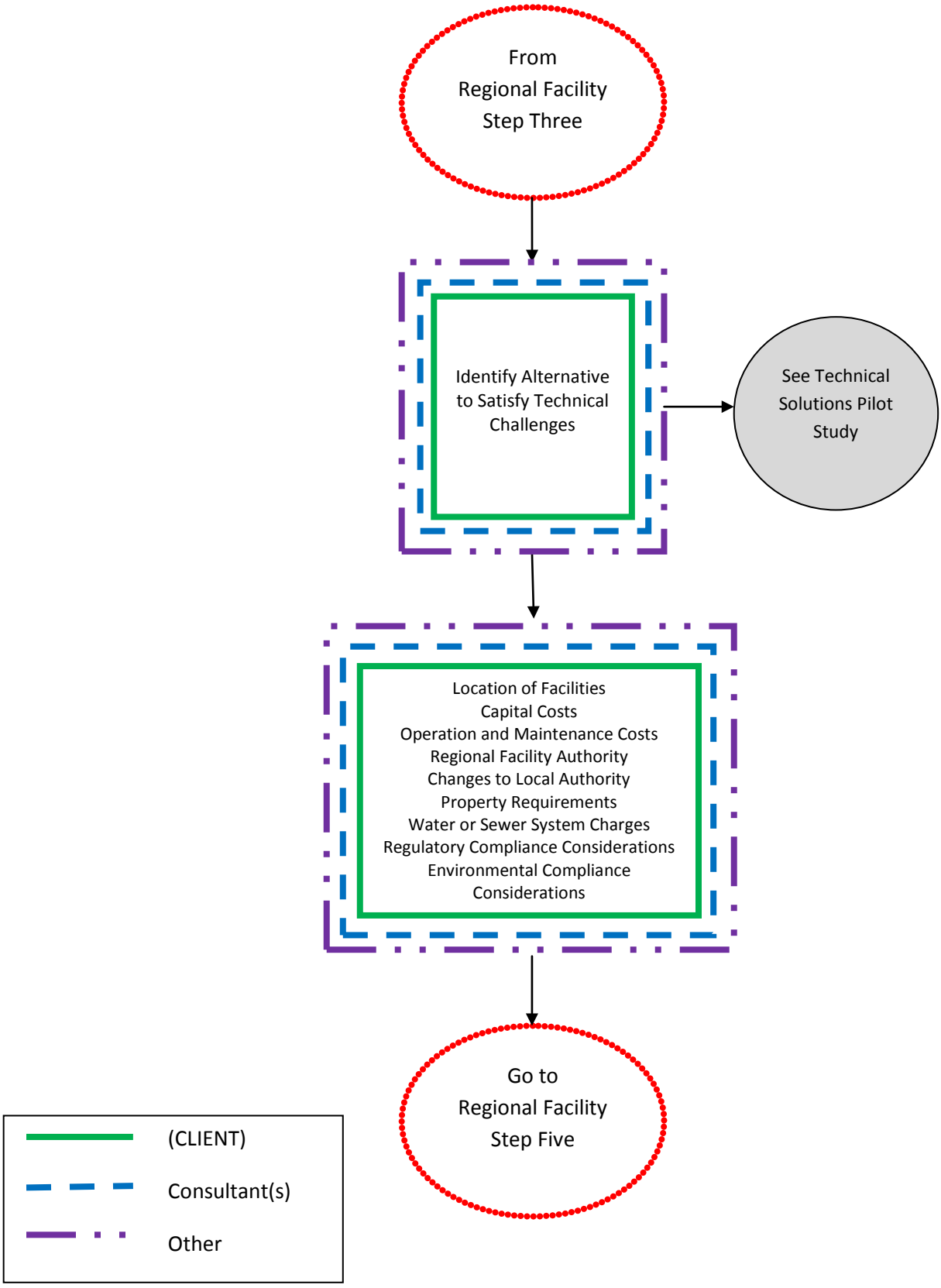
Step Three



(CLIENT)

Regional Facility (Water or Wastewater)

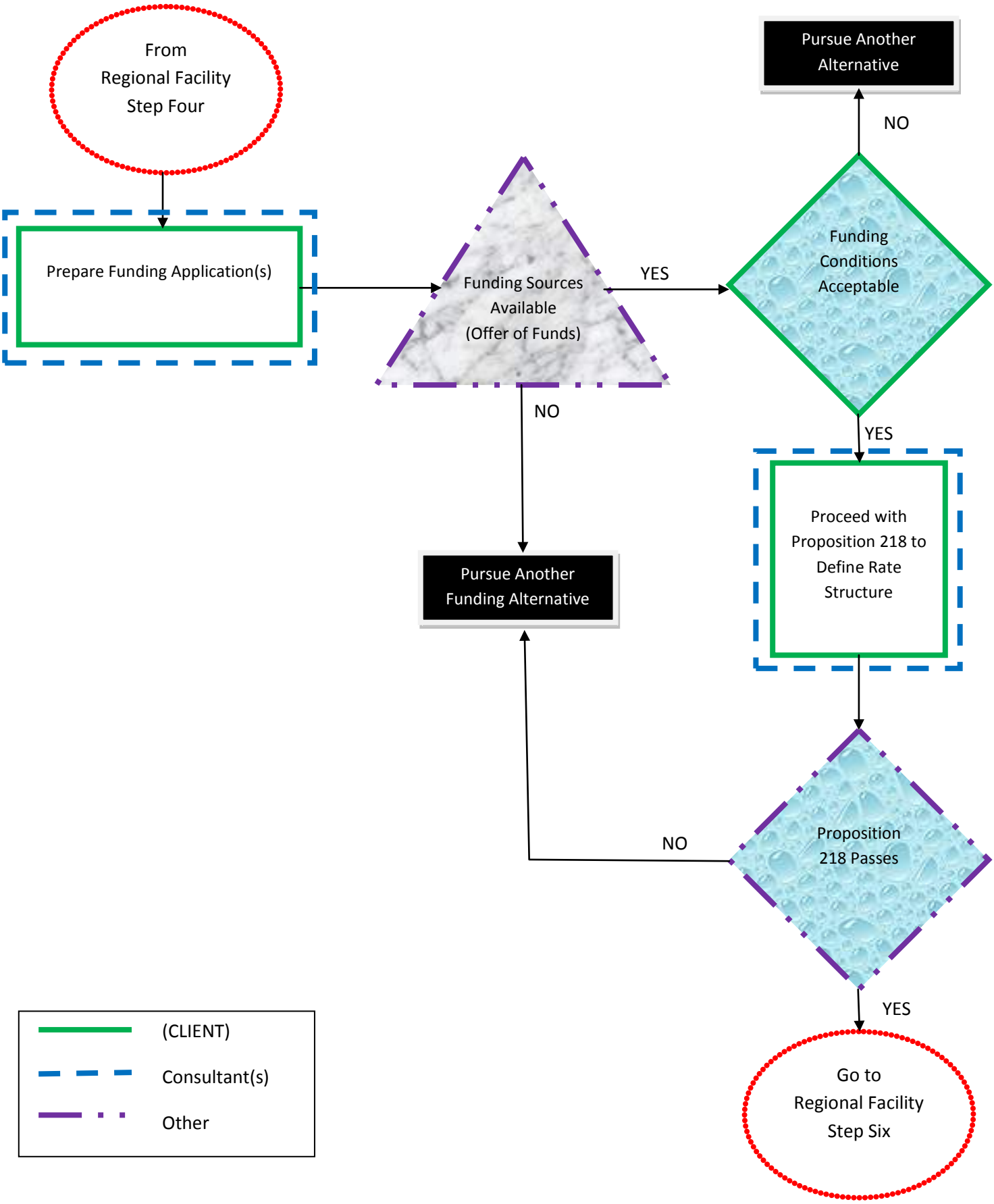
Step Four



(CLIENT)

Regional Facility (Water or Wastewater)

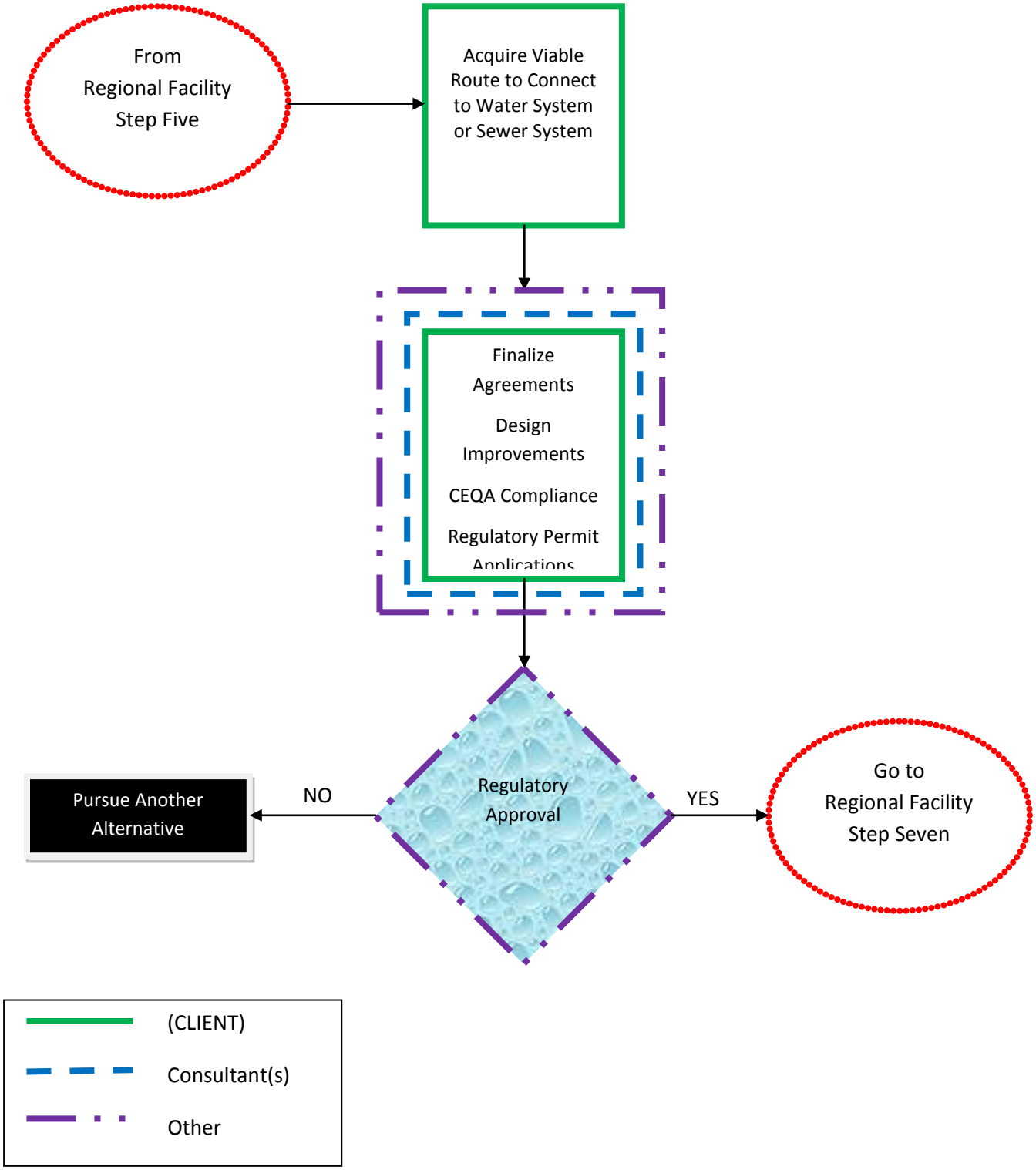
Step Five



(CLIENT)

Regional Facility (Water or Wastewater)

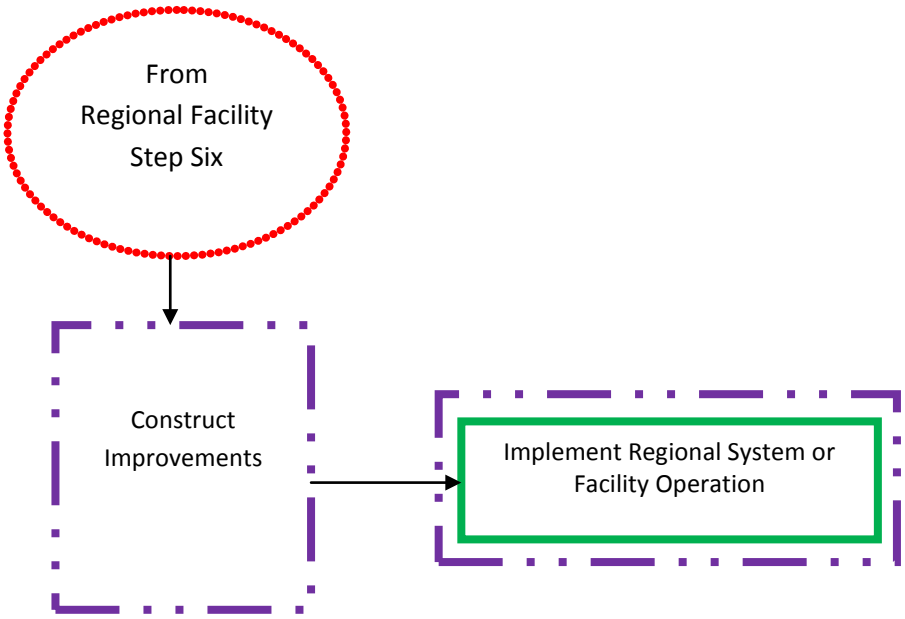
Step Six

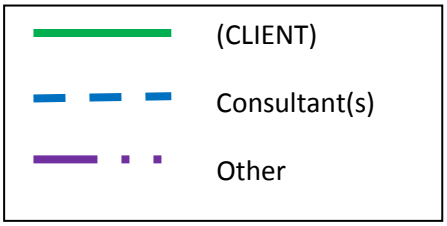


(CLIENT)

Regional Facility (Water or Wastewater)

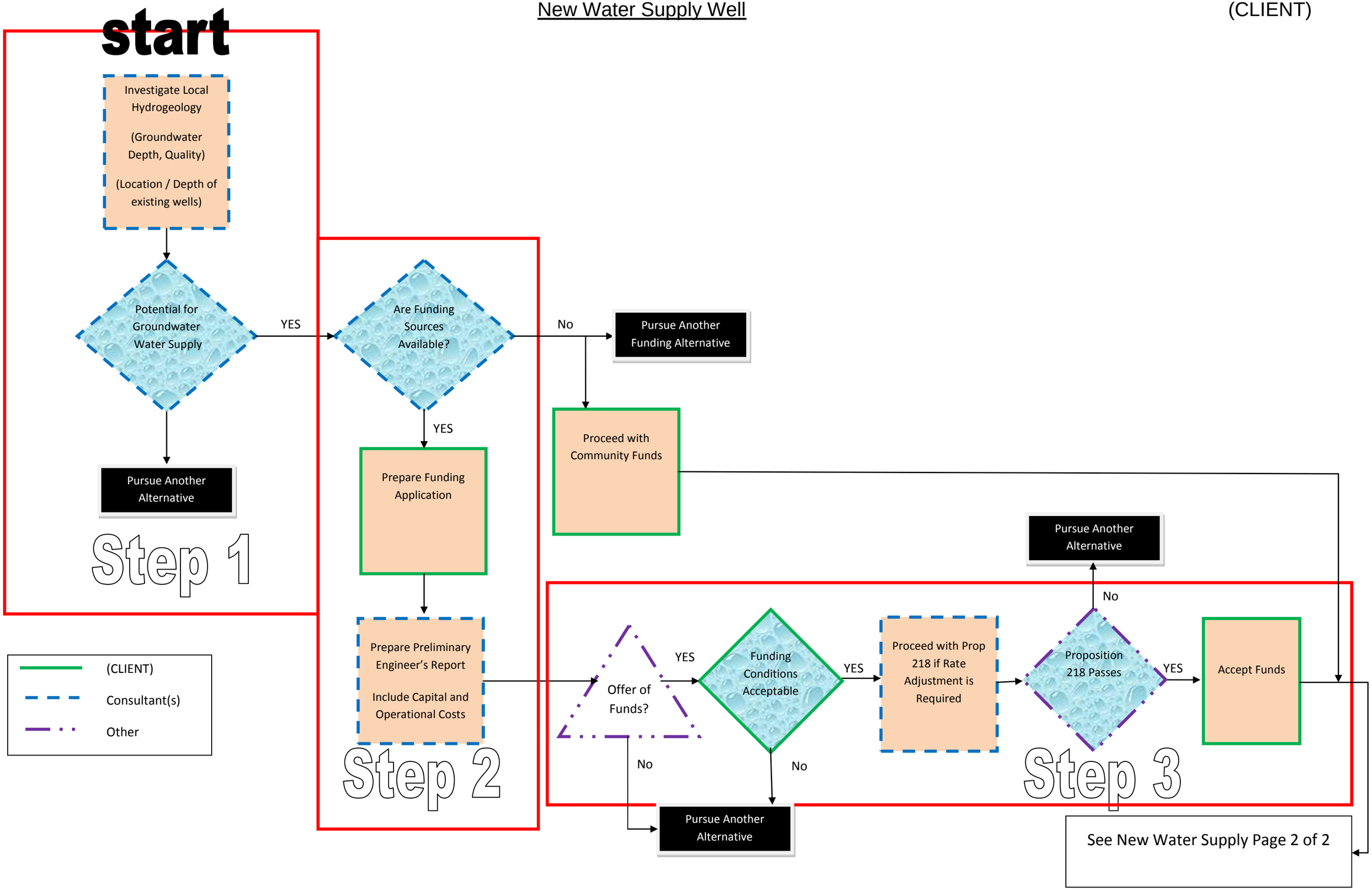
Step Seven

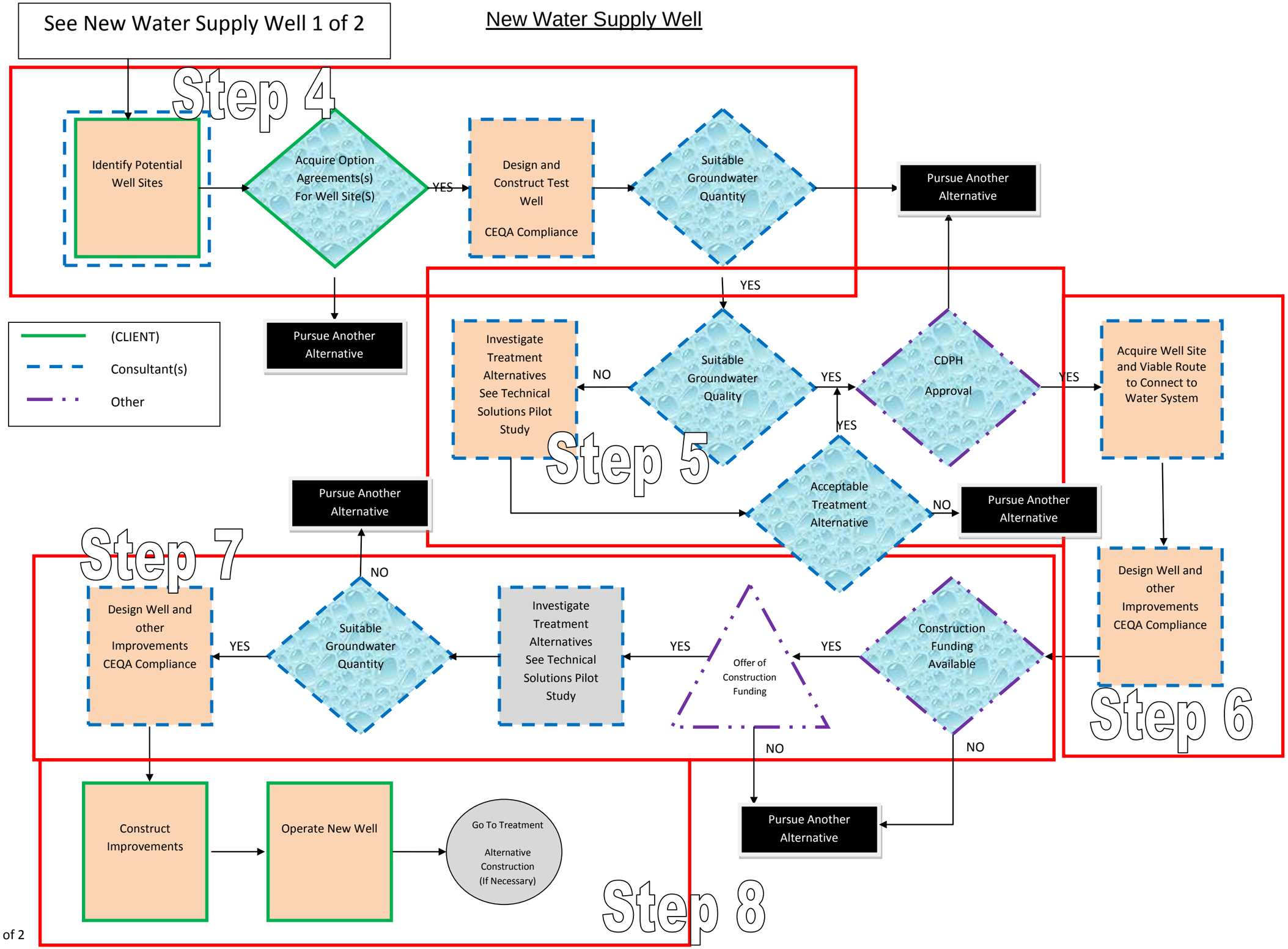




New Water Supply Well

(CLIENT)

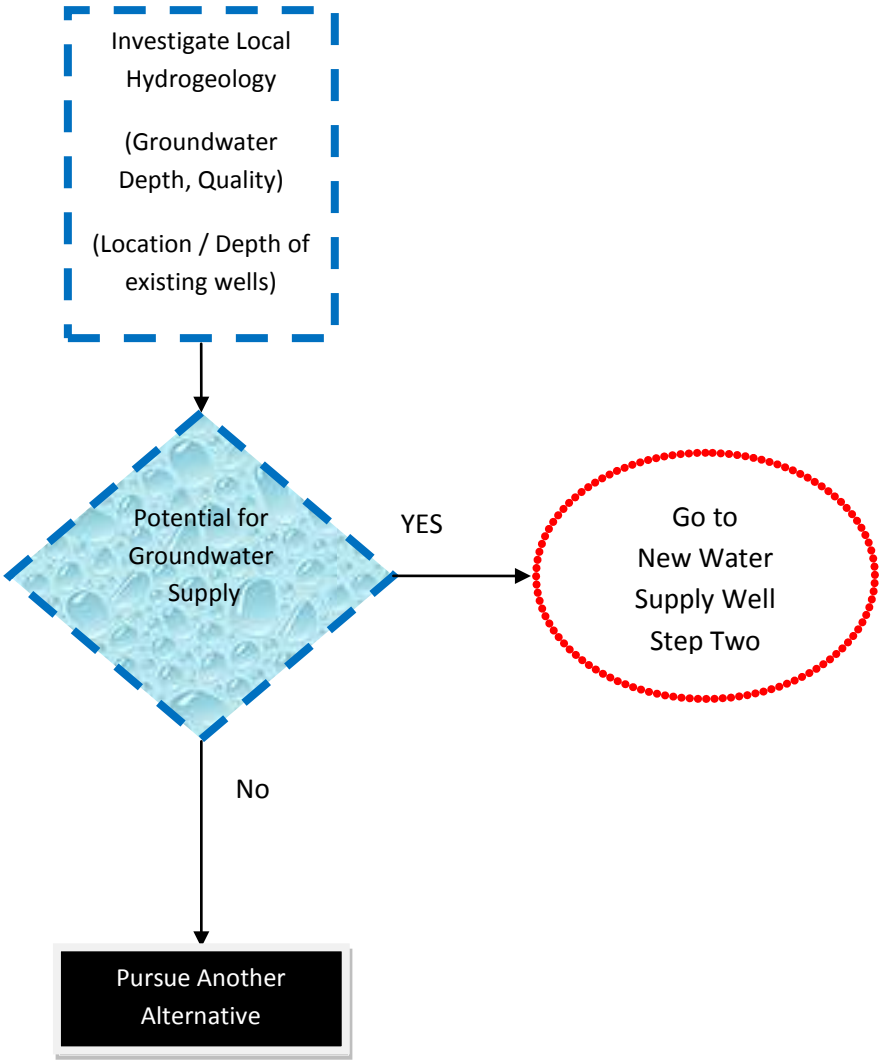


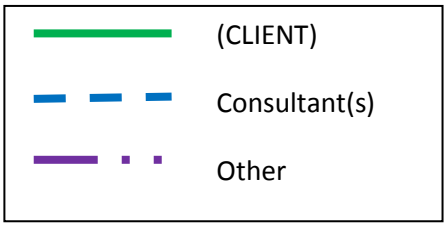

See New Water Supply Well 1 of 2
New Water Supply Well
(CLIENT)
Step 4
Identify Potential Well Sites
Acquire Option Agreements(s) For Well Site(S)
YES
Design and Construct Test Well
CEQA Compliance
Suitable Groundwater Quantity
Pursue Another Alternative
YES
Pursue Another Alternative
(CLIENT)
Consultant(s)
Other
Investigate Treatment Alternatives See Technical Solutions Pilot Study
NO
Suitable Groundwater Quality
YES
CDPH Approval
YES
Acquire Well Site and Viable Route to Connect to Water System
Step 5
YES
Acceptable Treatment Alternative
NO
Pursue Another Alternative
Pursue Another Alternative
Step 7
NO
Design Well and other Improvements CEQA Compliance
YES
Suitable Groundwater Quantity
Investigate Treatment Alternatives See Technical Solutions Pilot Study
YES
Offer of Construction Funding
YES
Construction Funding Available
Design Well and other Improvements CEQA Compliance
Step 6
NO
NO
Pursue Another Alternative
Construct Improvements
Operate New Well
Go To Treatment
Alternative Construction (If Necessary)
Step 8

(CLIENT)

New Water Supply Well

Step One





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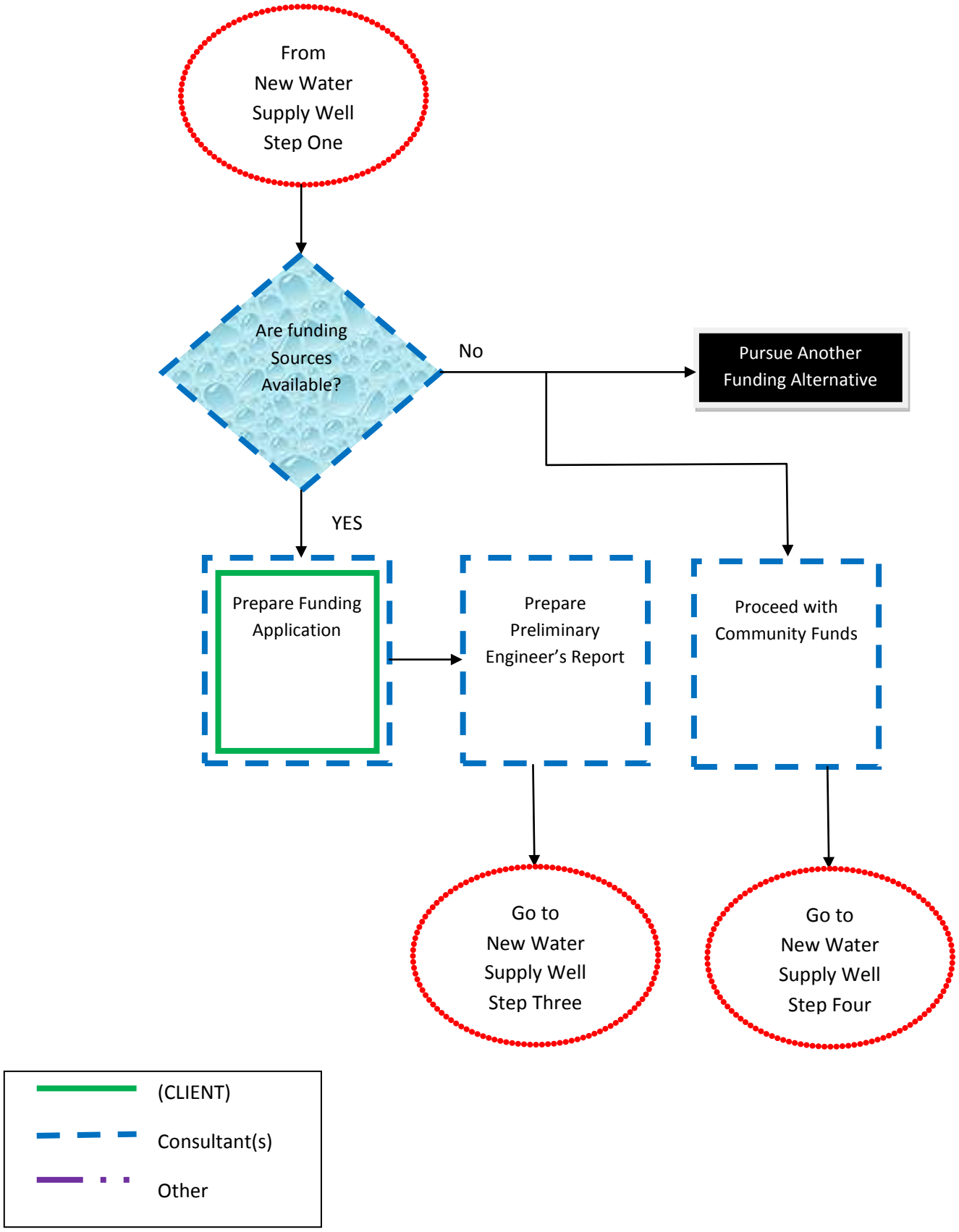
New Water Supply Well

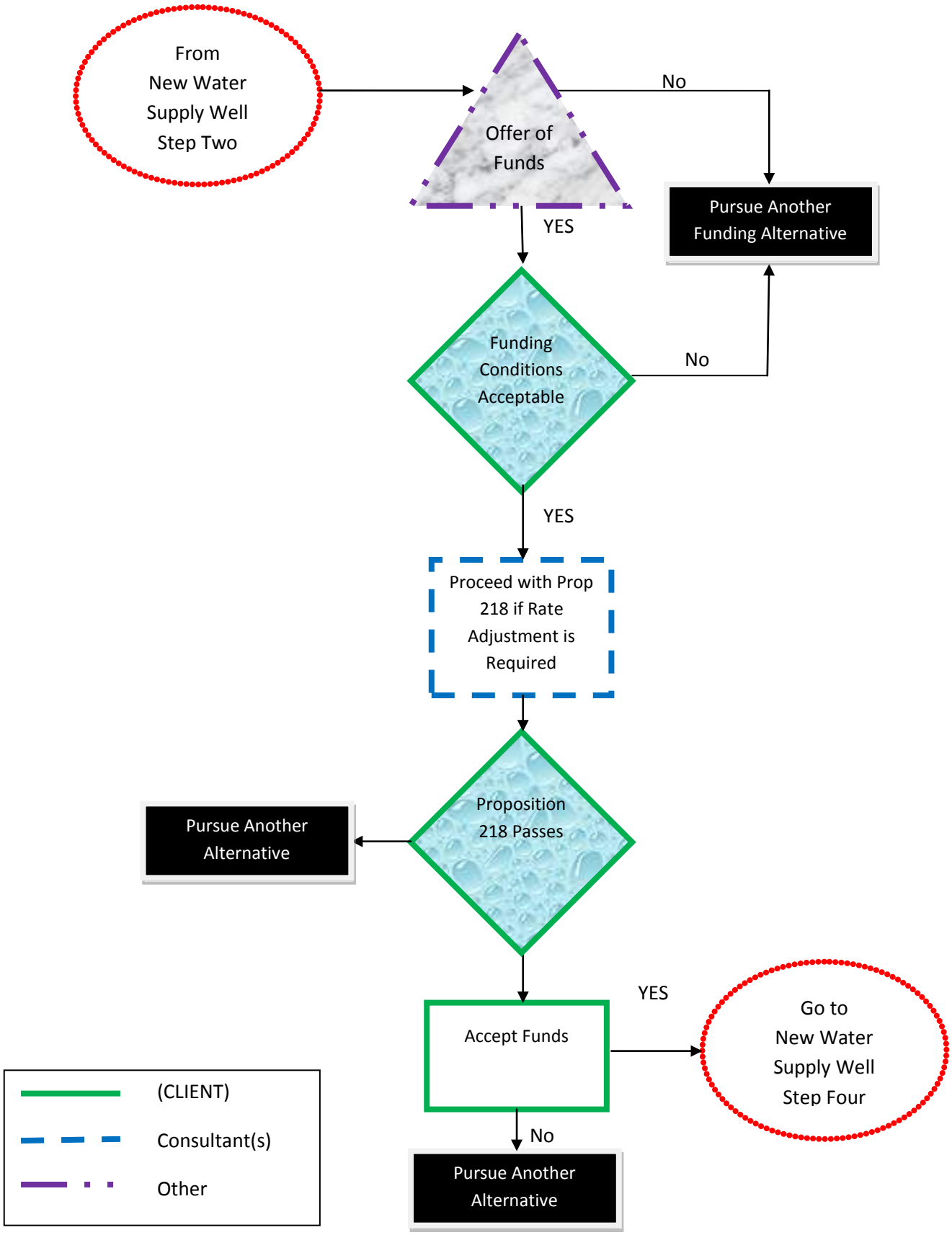
Step Two



(CLIENT)

New Water Supply Well

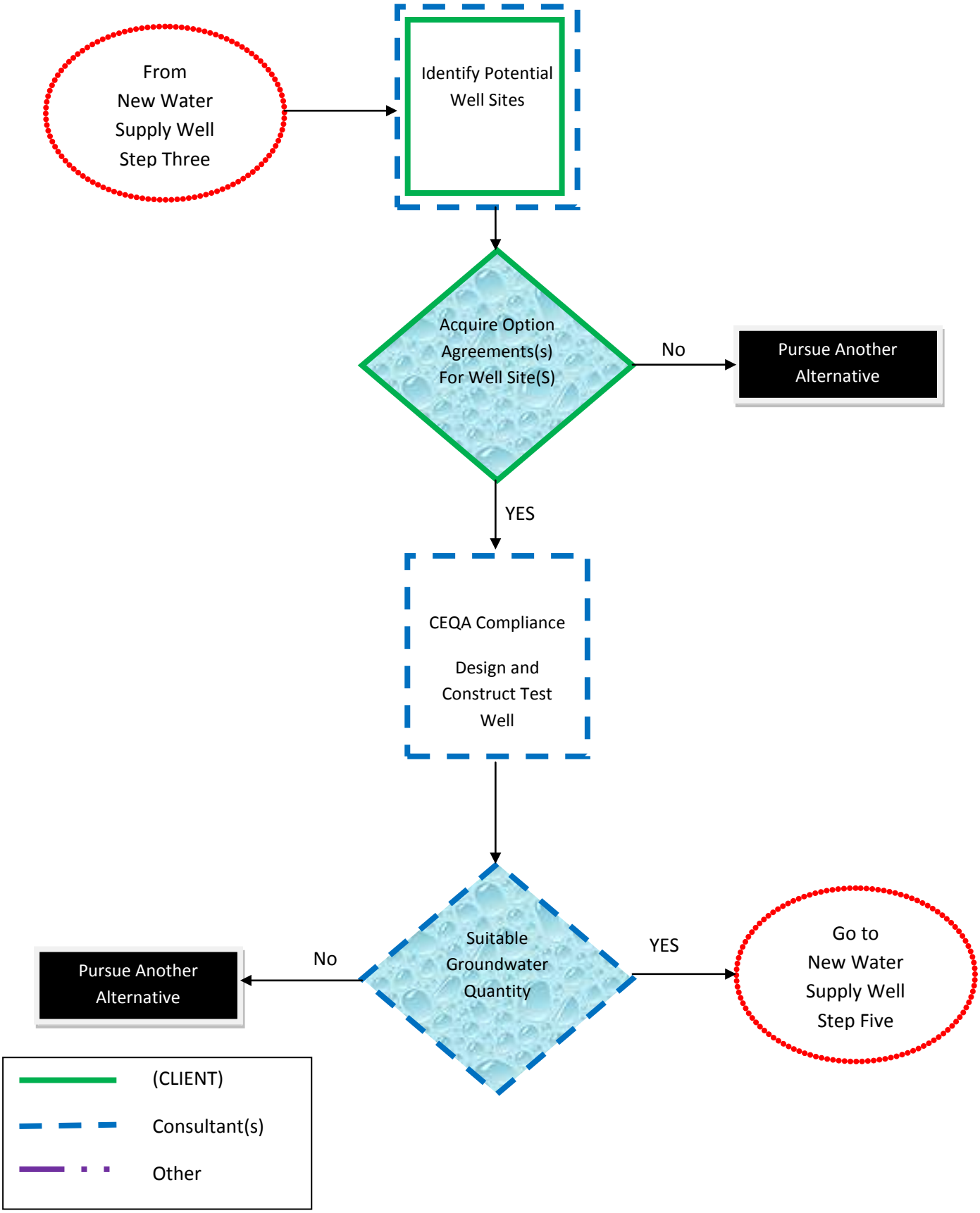
Step Three



(CLIENT)

New Water Supply Well

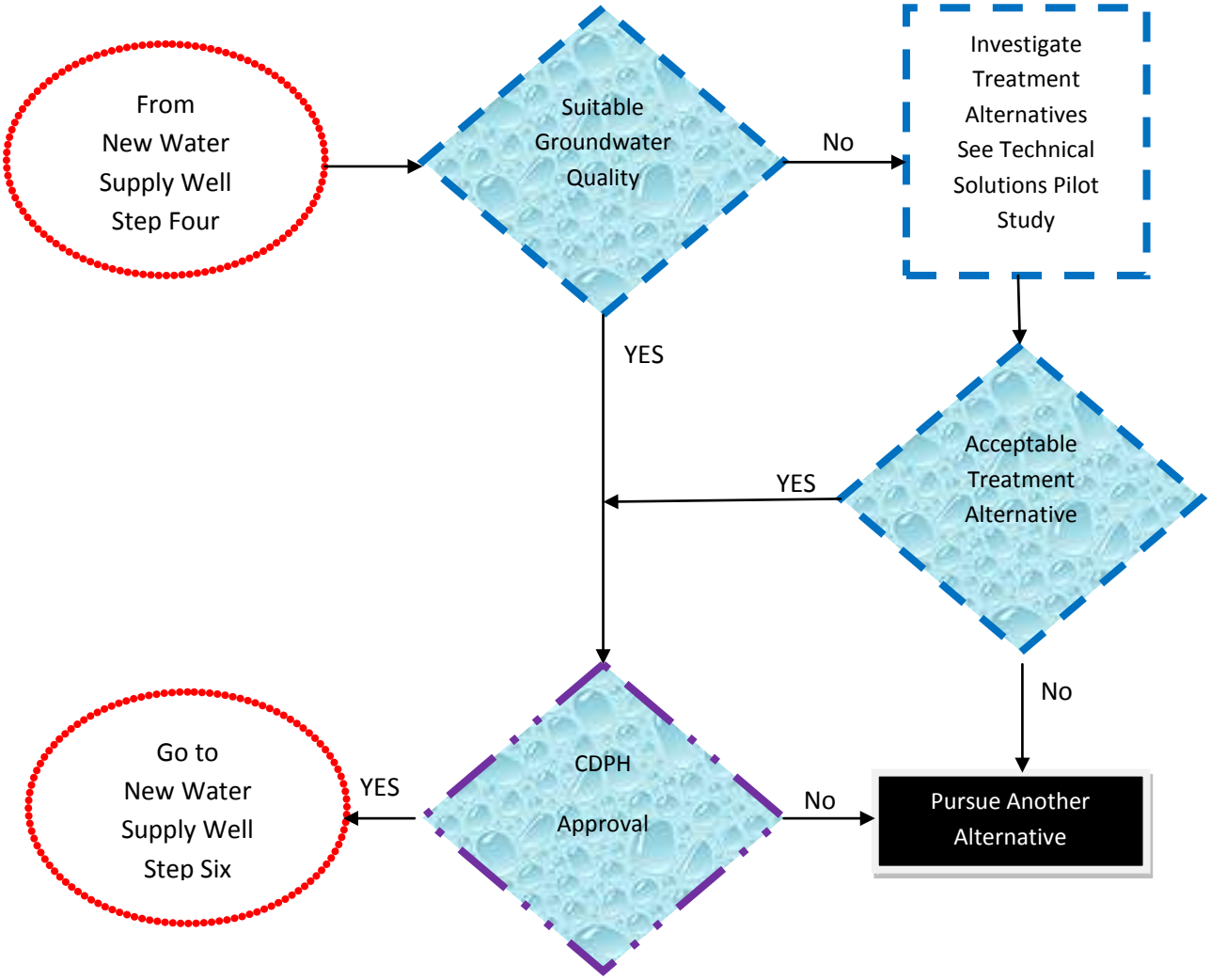
Step Four

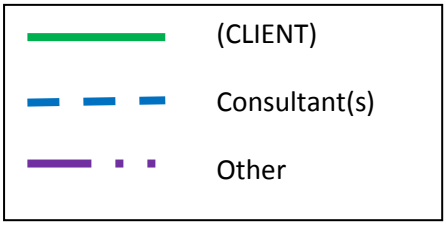


(CLIENT)

New Water Supply Well

Step Five

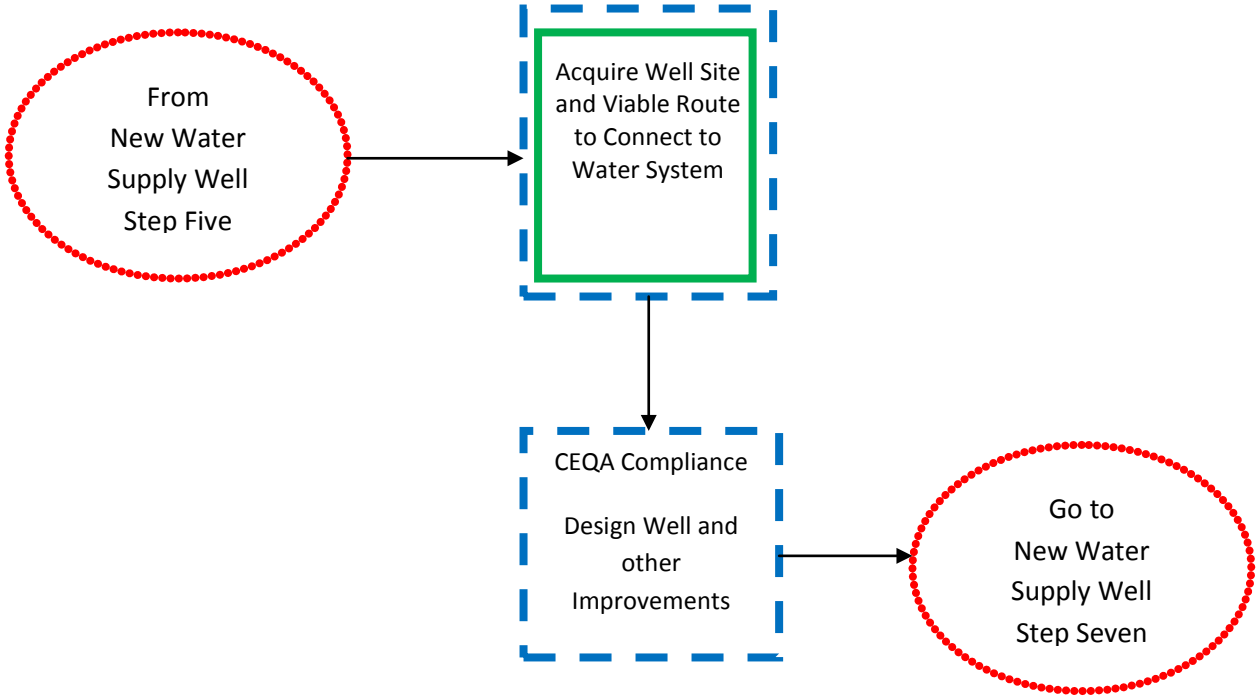


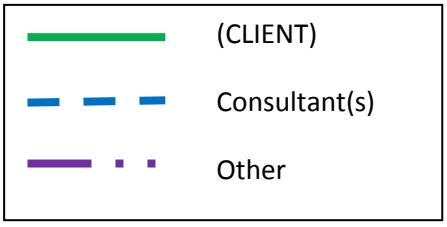


(CLIENT)

New Water Supply Well

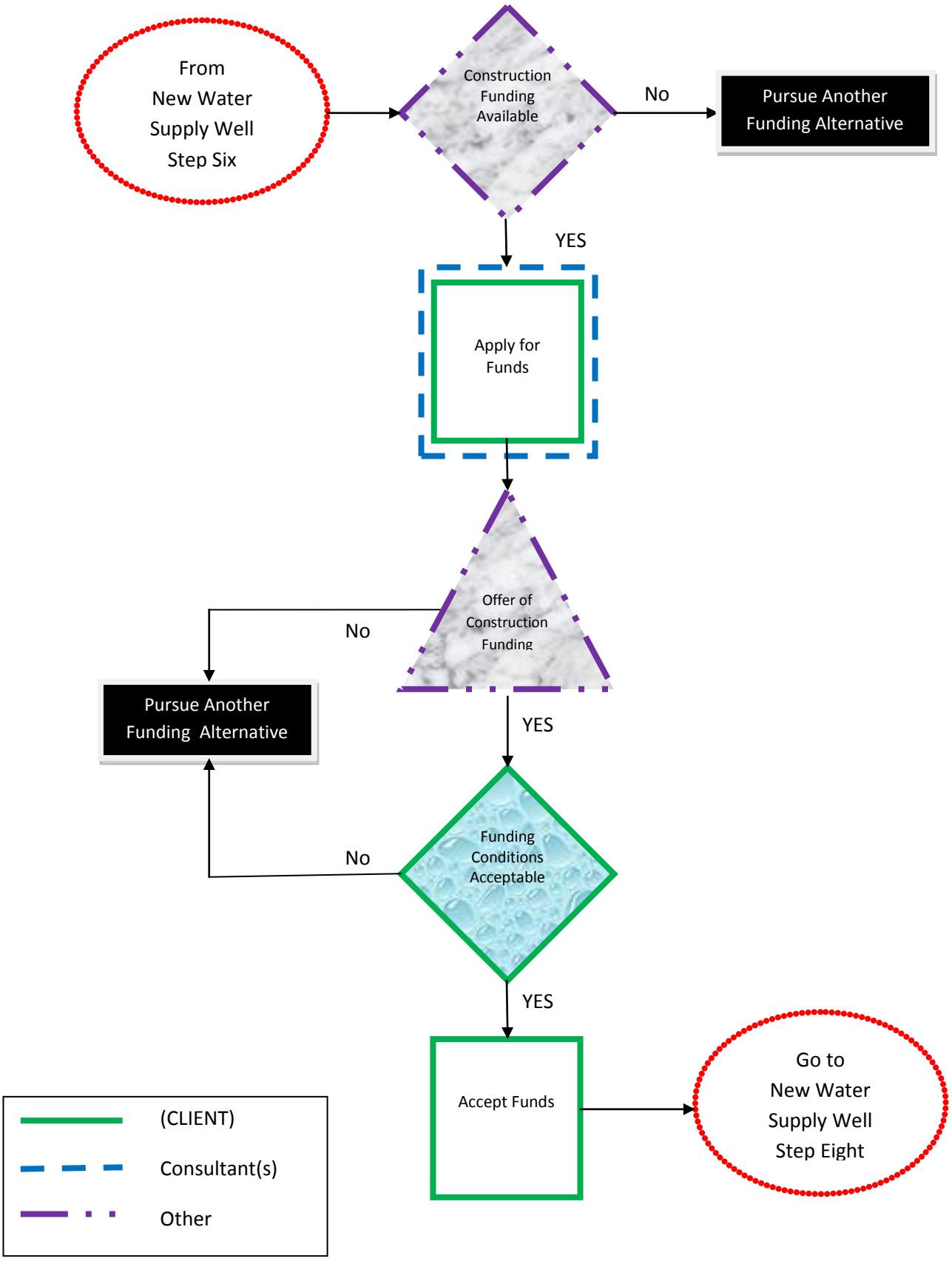
Step Six





(CLIENT)
New Water Supply Well
Step Seven

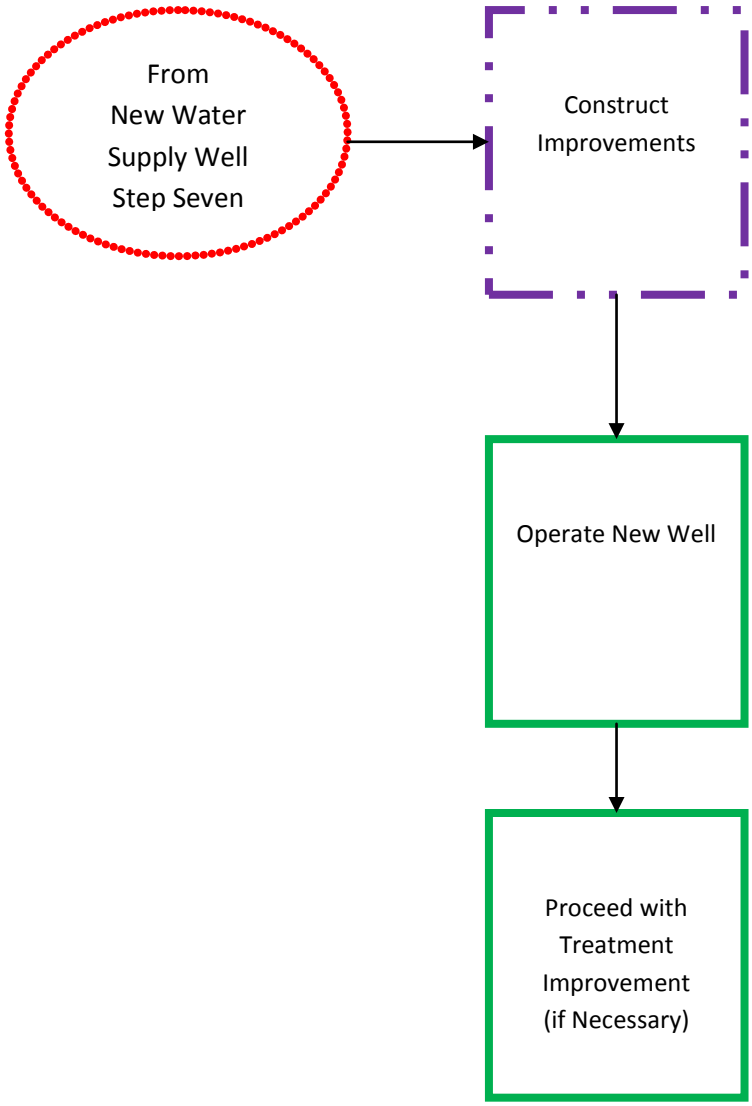
Offer of Construction Funding

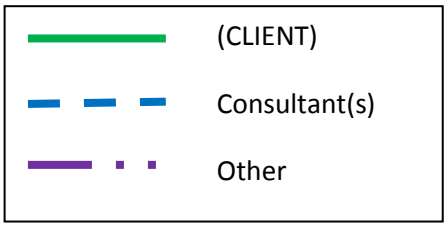


(CLIENT)

New Water Supply Well

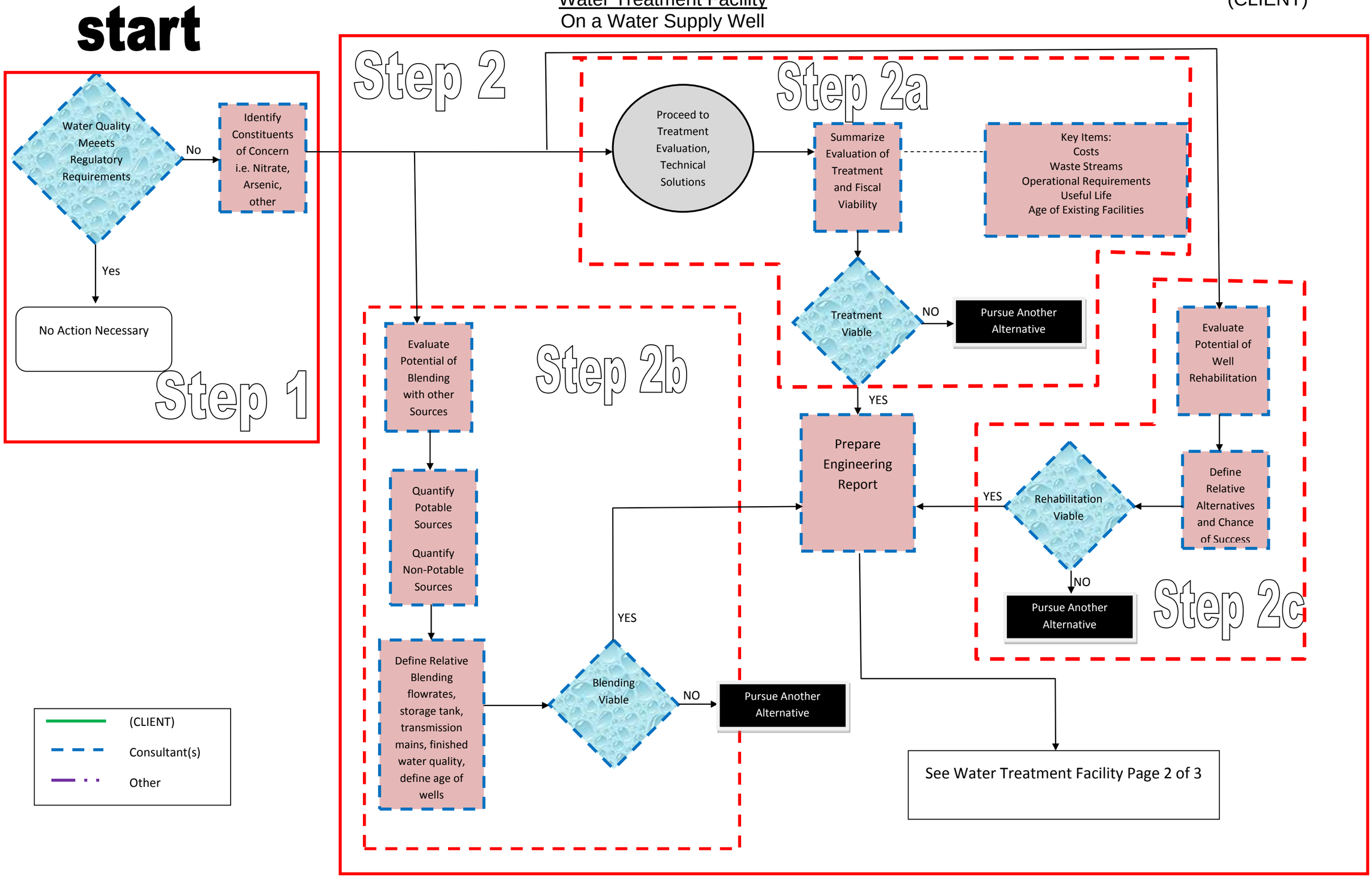
Step Eight





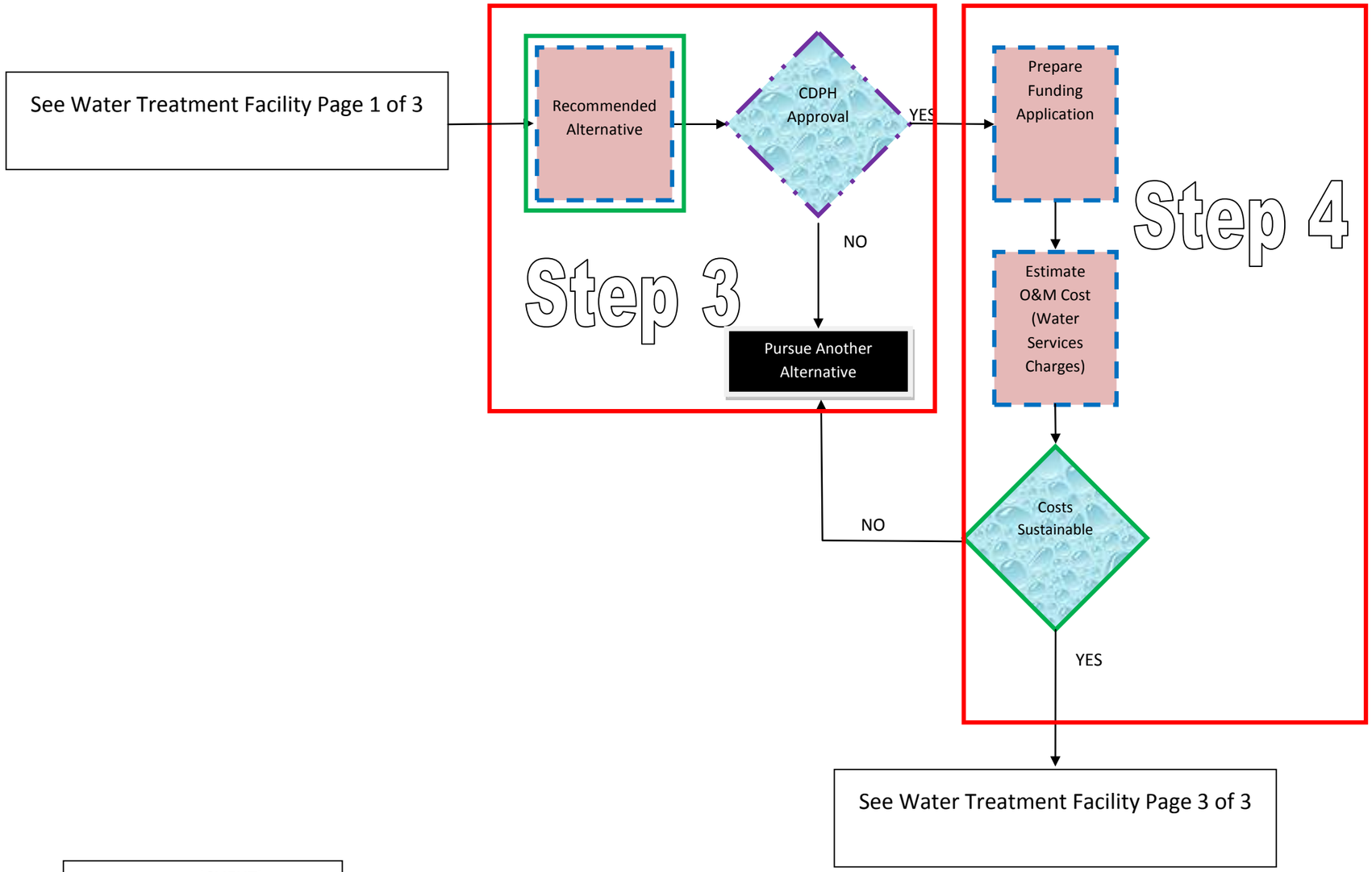
Water Treatment Facility
On a Water Supply Well

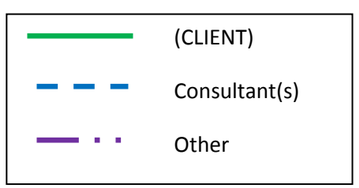
(CLIENT)



Water Treatment Facility
On a Water Supply Well

(CLIENT)

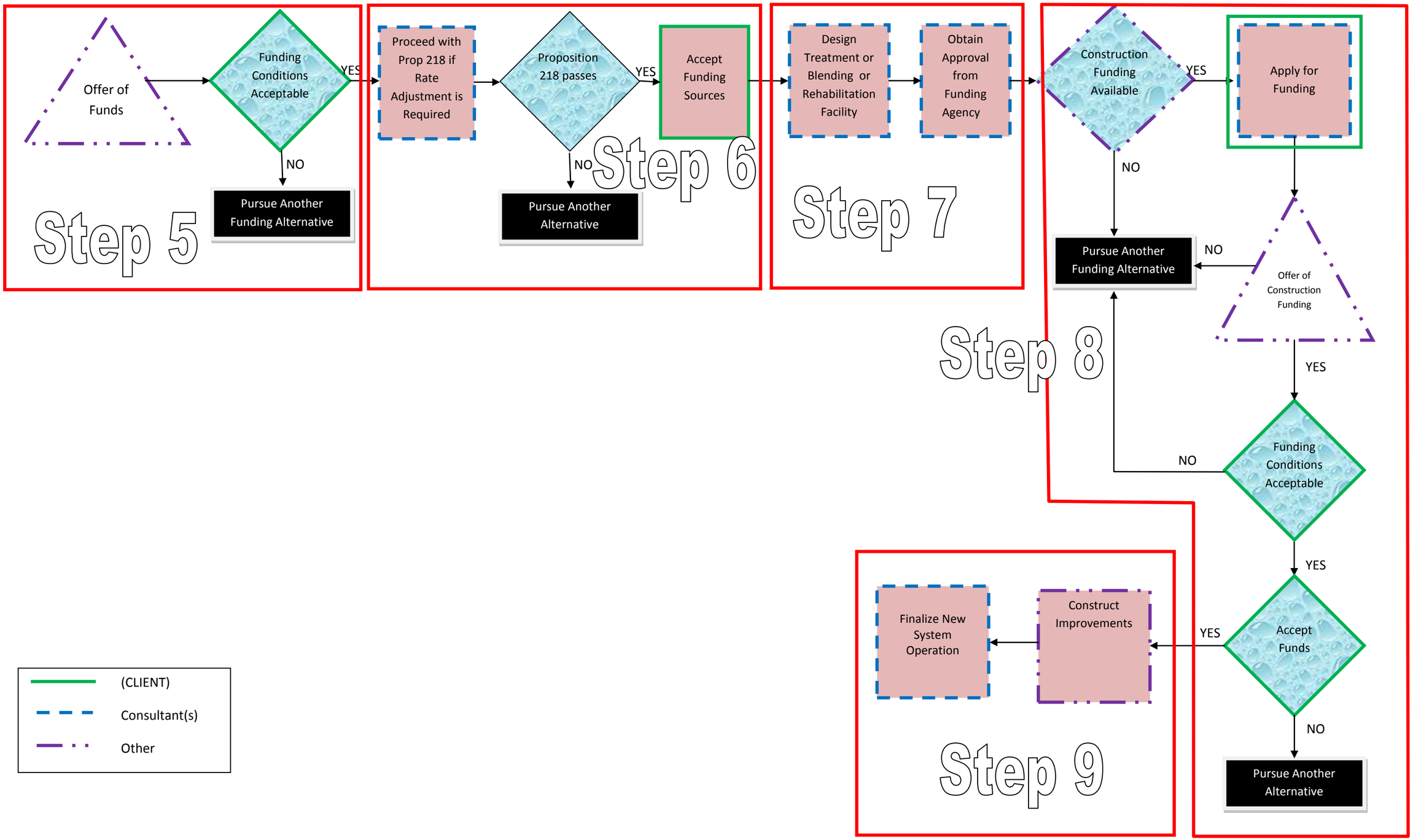




See Water Treatment Facility Page 2 of 3

Water Treatment Facility
On a Water Supply Well

(CLIENT)



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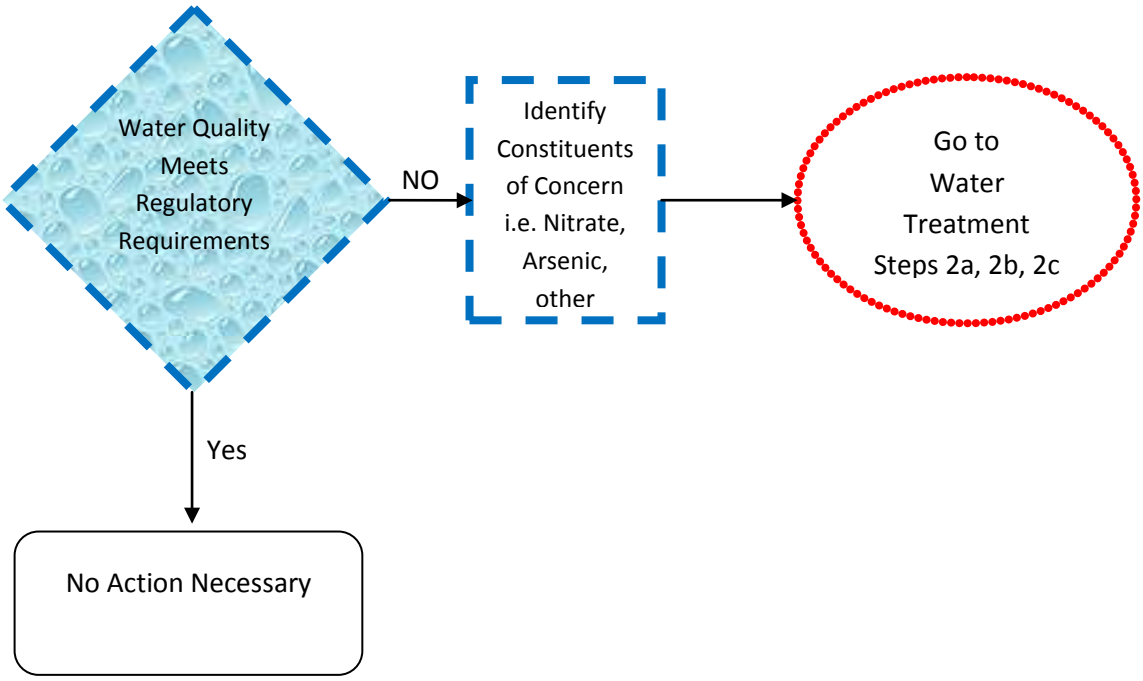
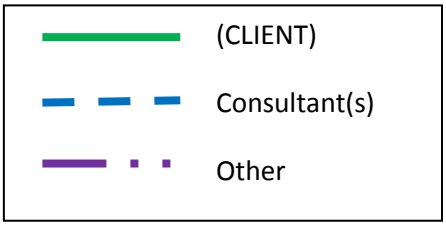
Water Treatment Facility

On a New or Existing Water Supply Well

Step One





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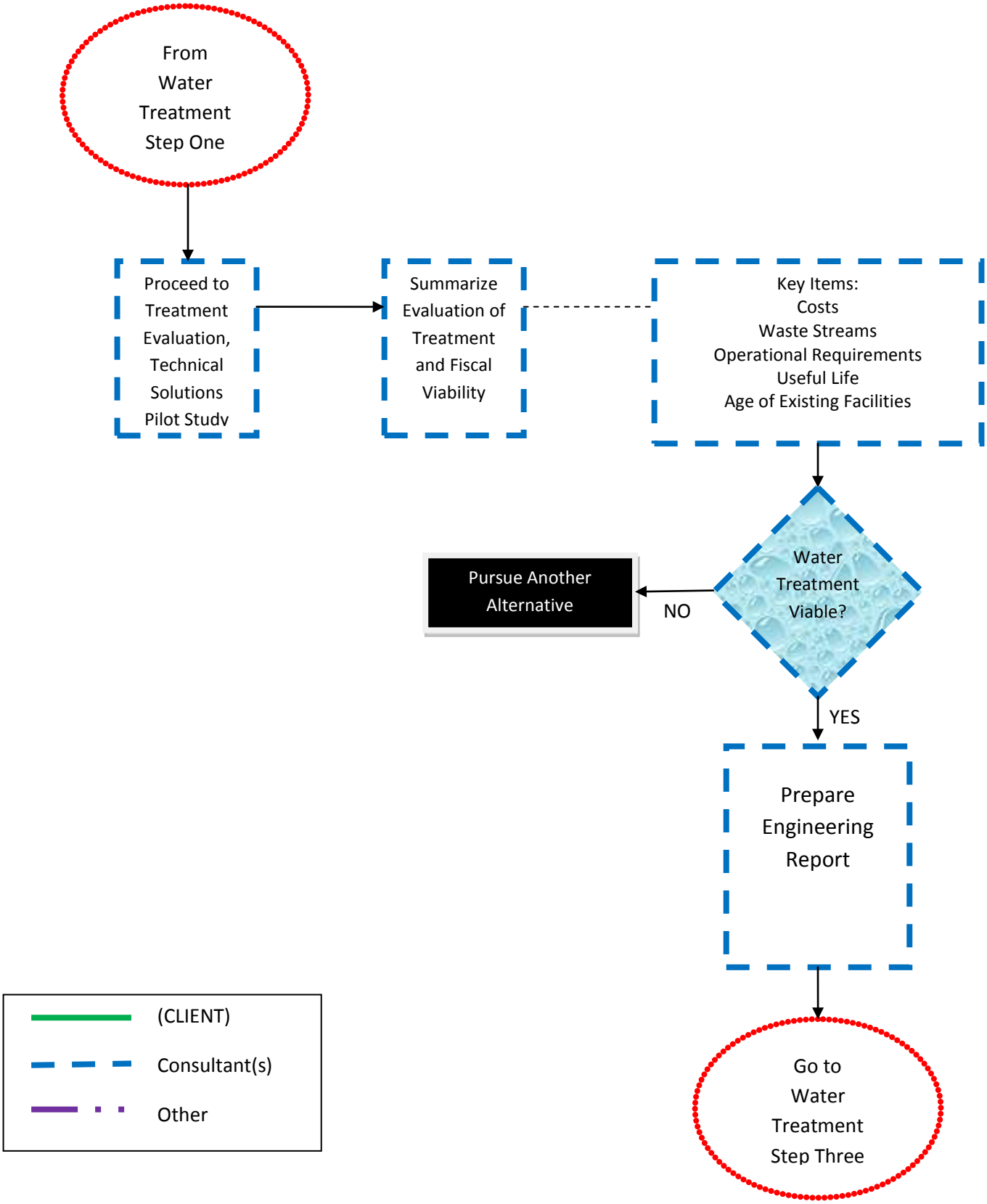
Water Treatment Facility

On a New or Existing Water Supply Well

Step 2a



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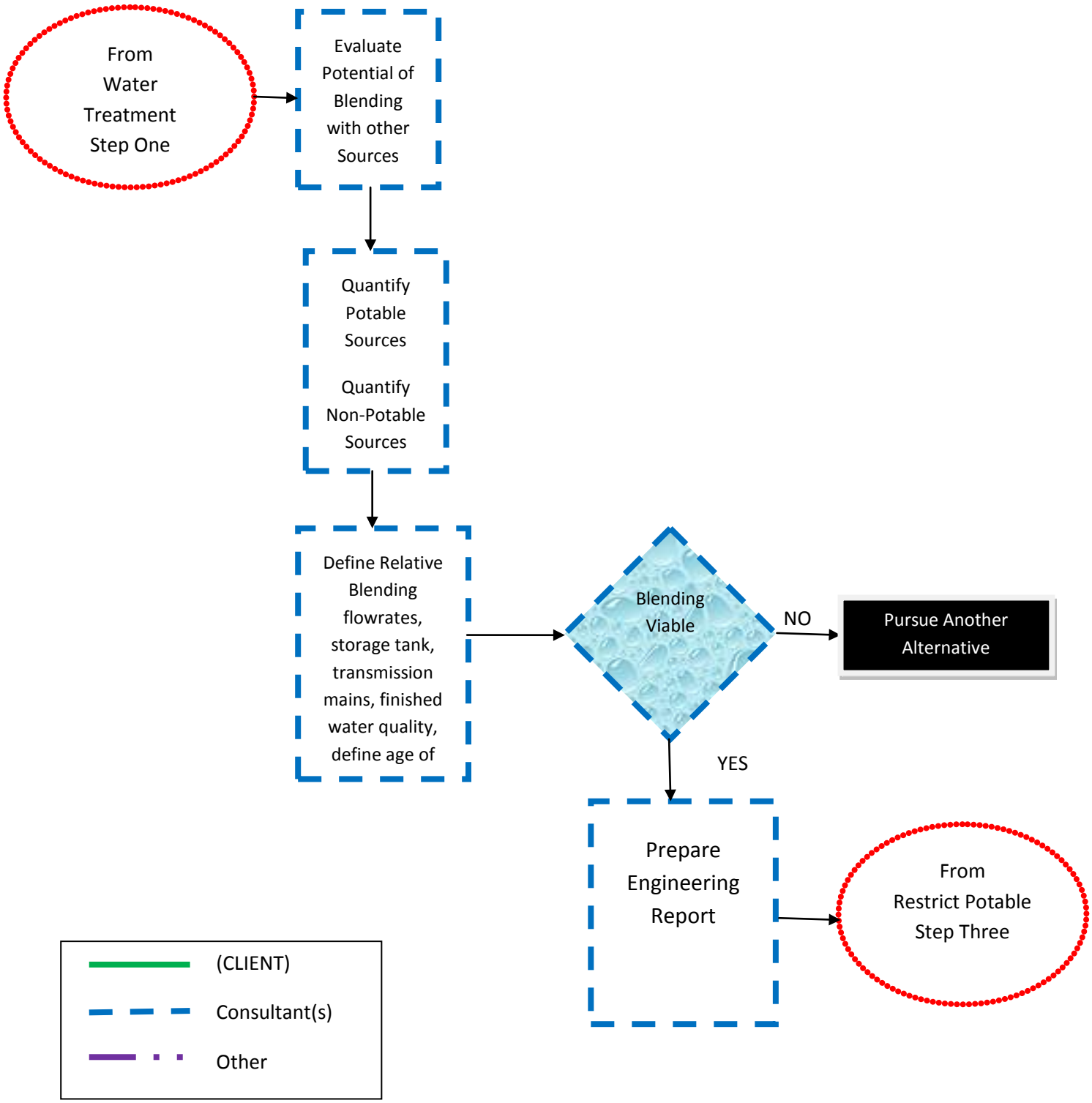
Water Treatment Facility

On a New or Existing Water Supply Well

Step 2b

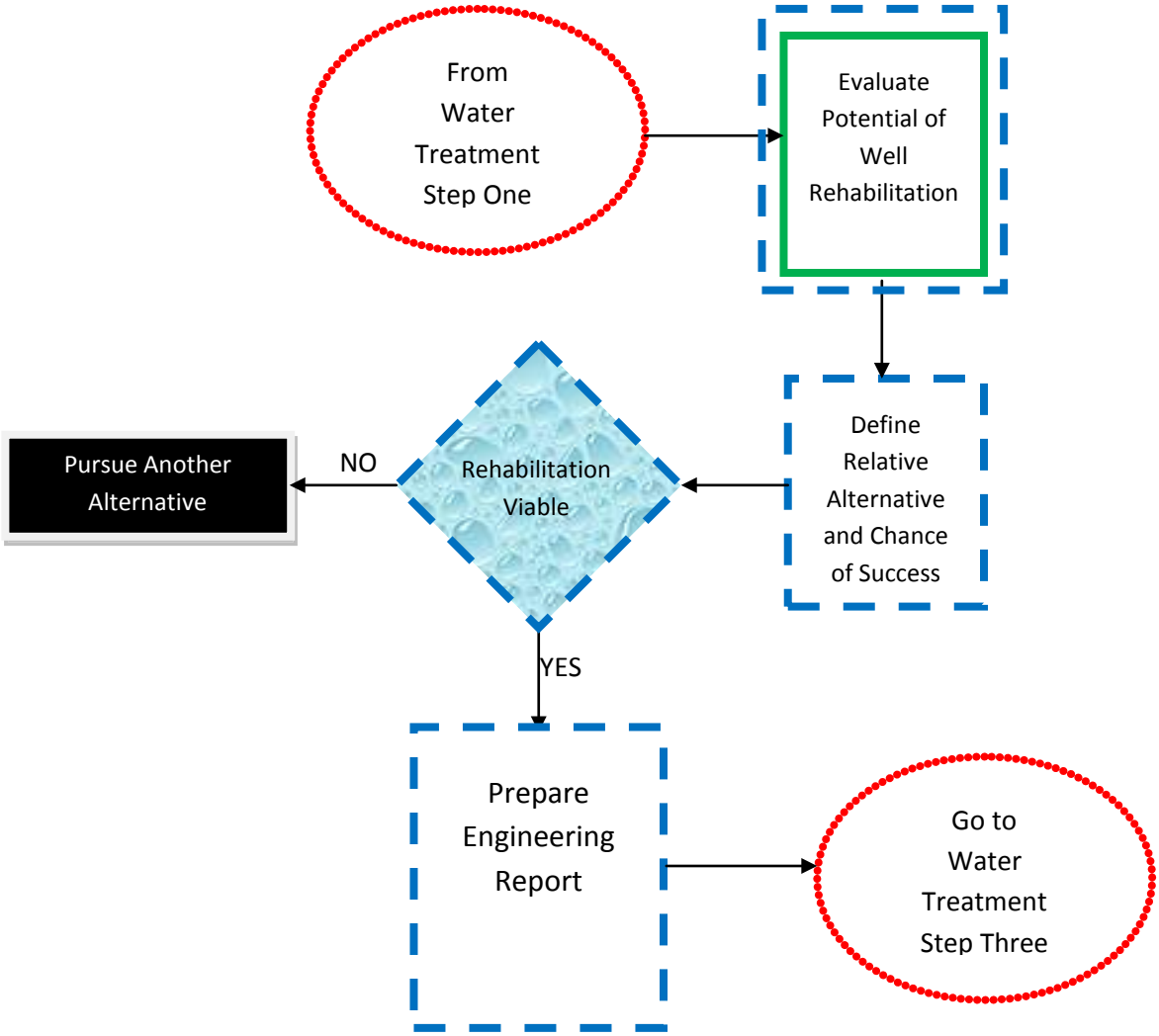


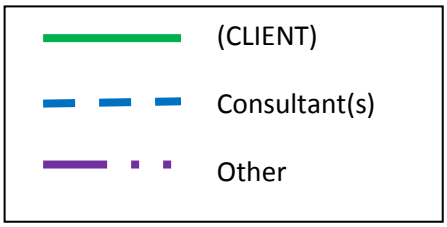
(CLIENT)

Water Treatment Facility

On a New or Existing Water Supply Well

Step 2c





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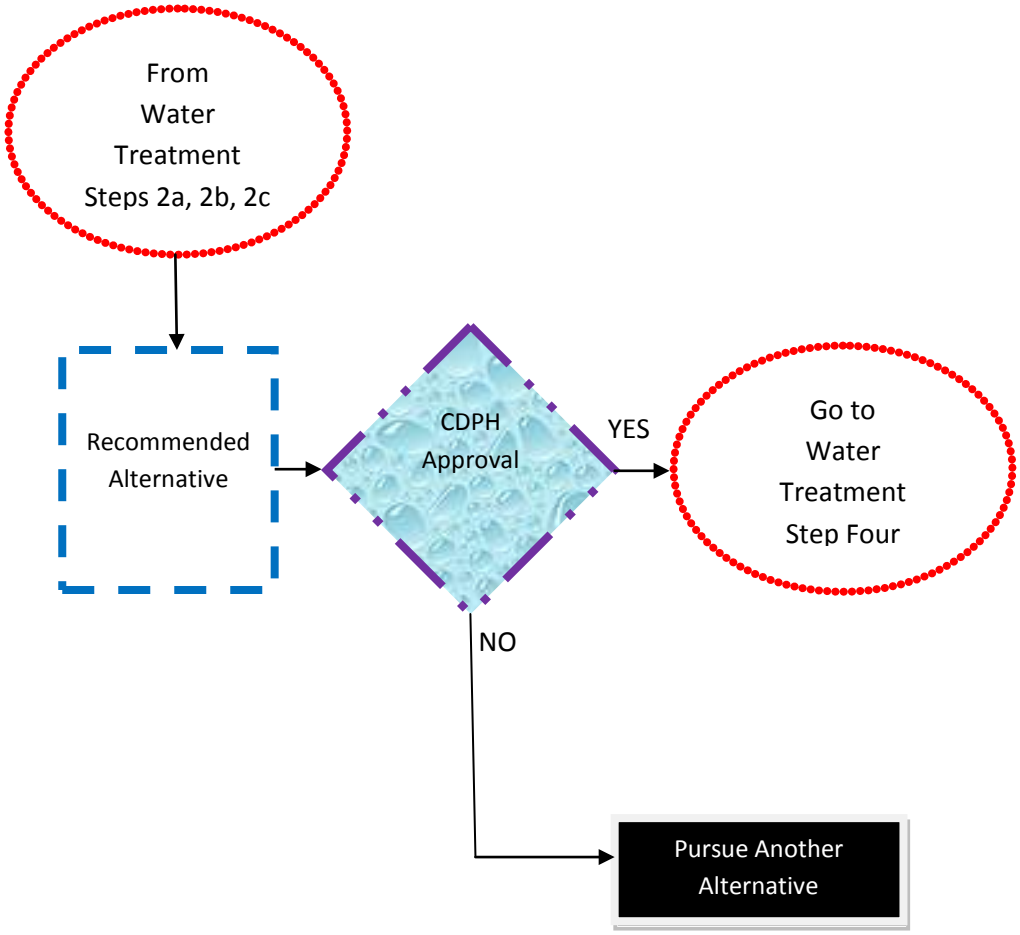
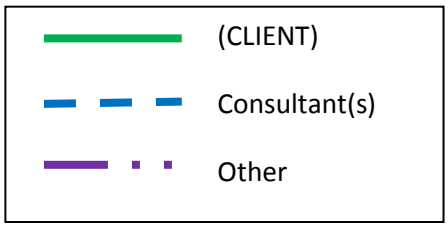
Water Treatment Facility

On a New or Existing Water Supply Well

Step 3



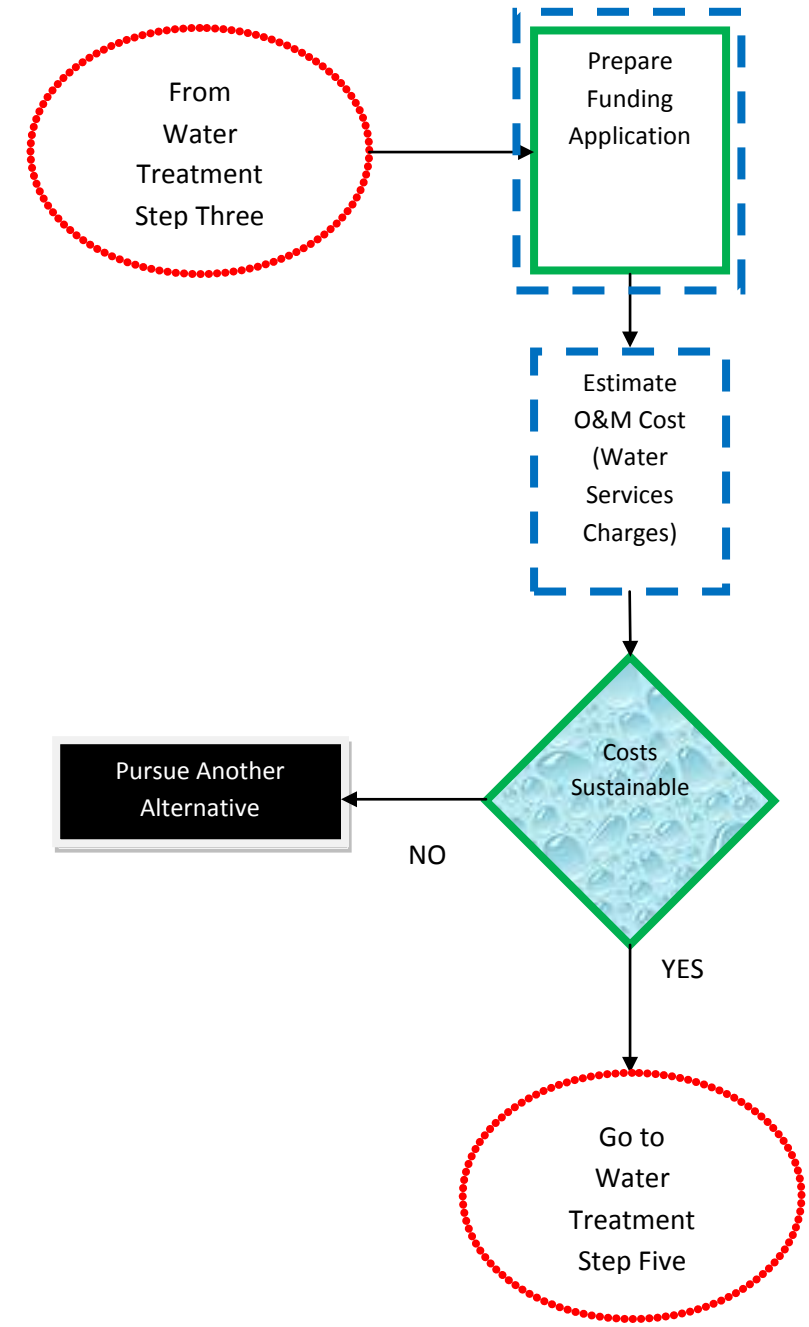


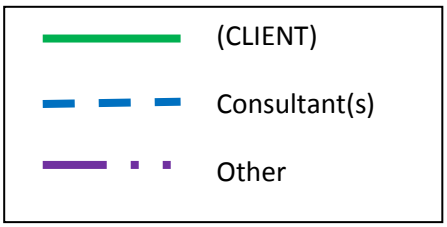
(CLIENT)

Water Treatment Facility

On a New or Existing Water Supply Well

Step 4



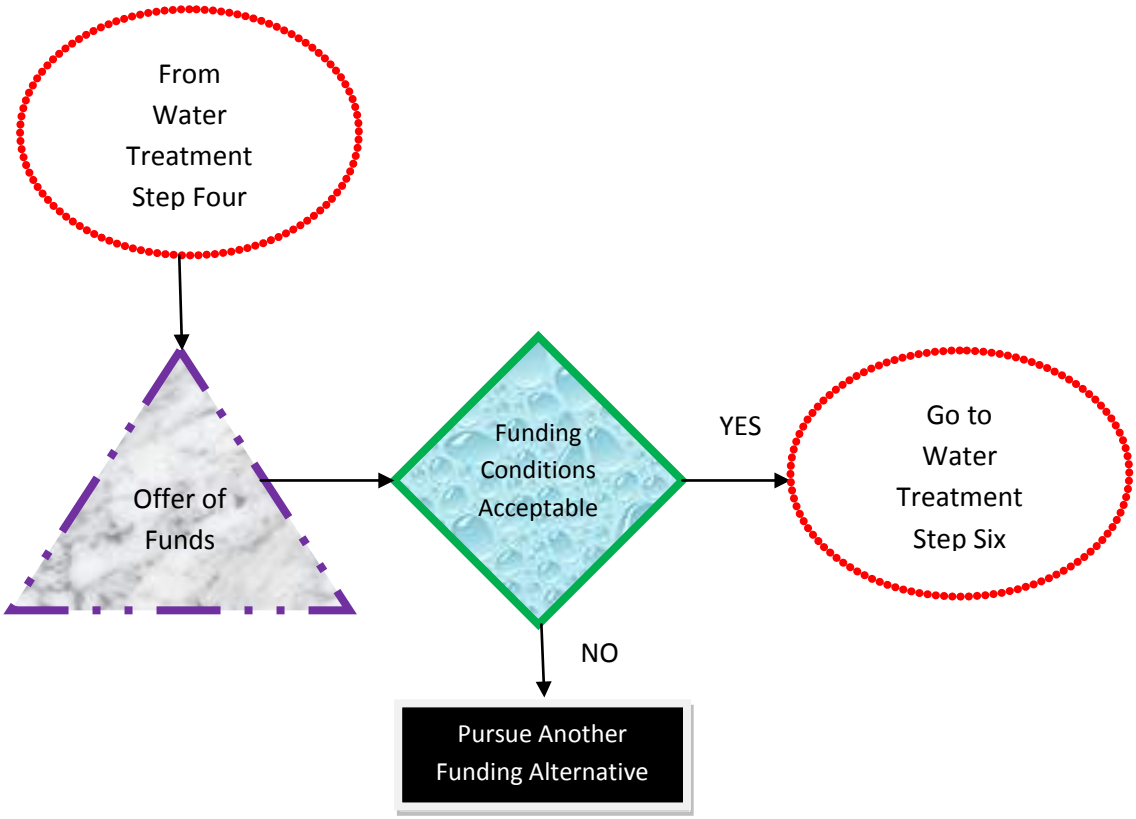


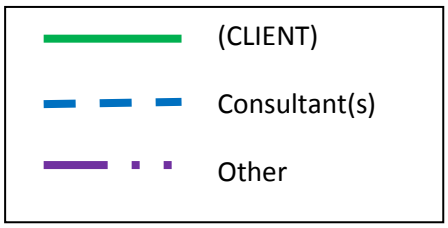
(CLIENT)

Water Treatment Facility

On a New or Existing Water Supply Well

Step 5





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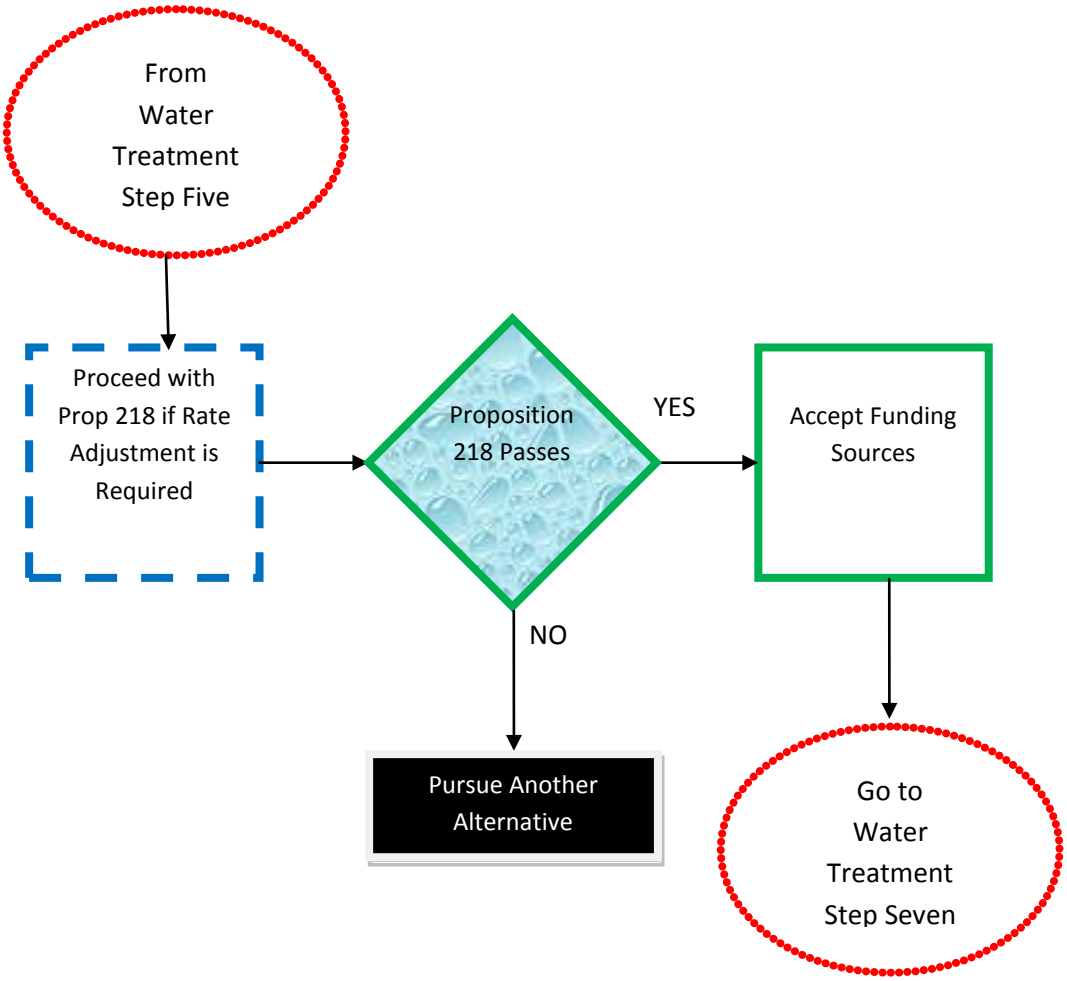
Water Treatment Facility

On a New or Existing Water Supply Well

Step 6

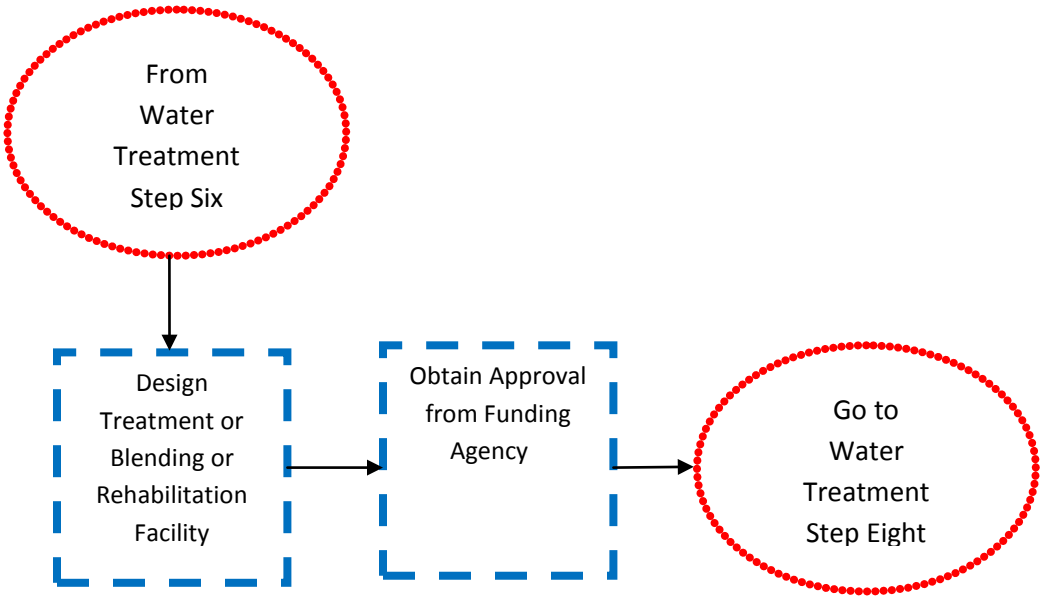


(CLIENT)

Water Treatment Facility

On a New or Existing Water Supply Well

Step 7



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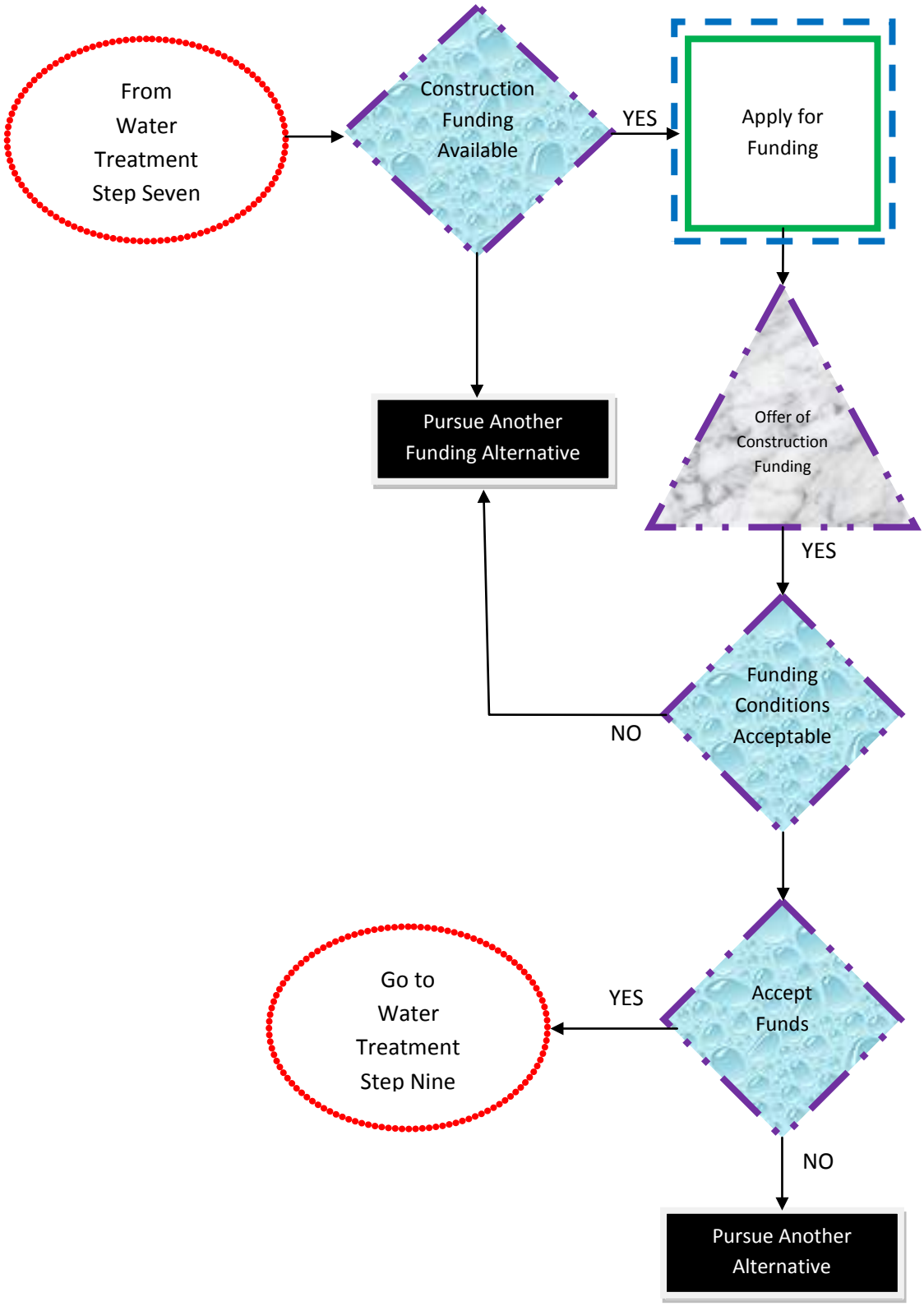
Water Treatment Facility

On a New or Existing Water Supply Well

Step 8

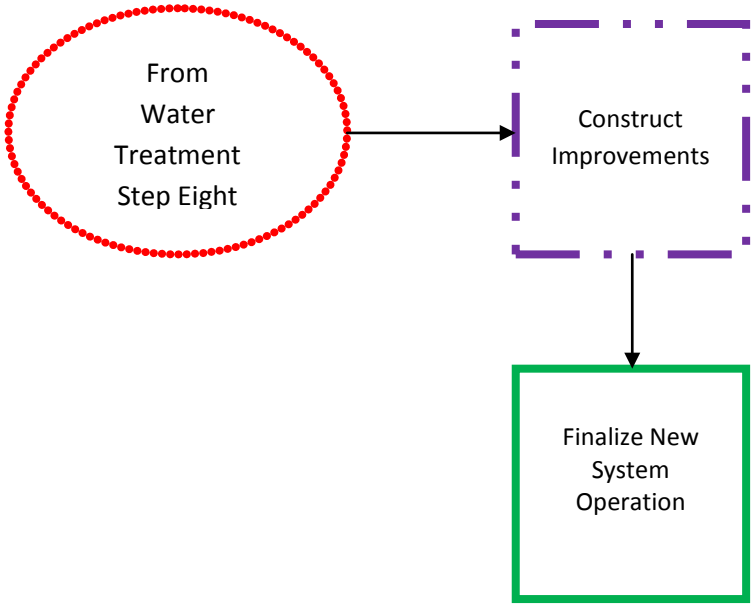


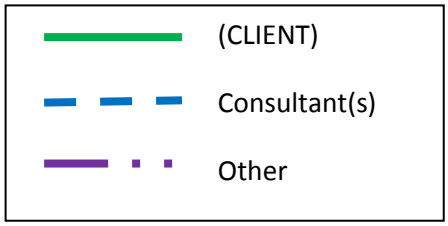
(CLIENT)

Water Treatment Facility

On a New or Existing Water Supply Well

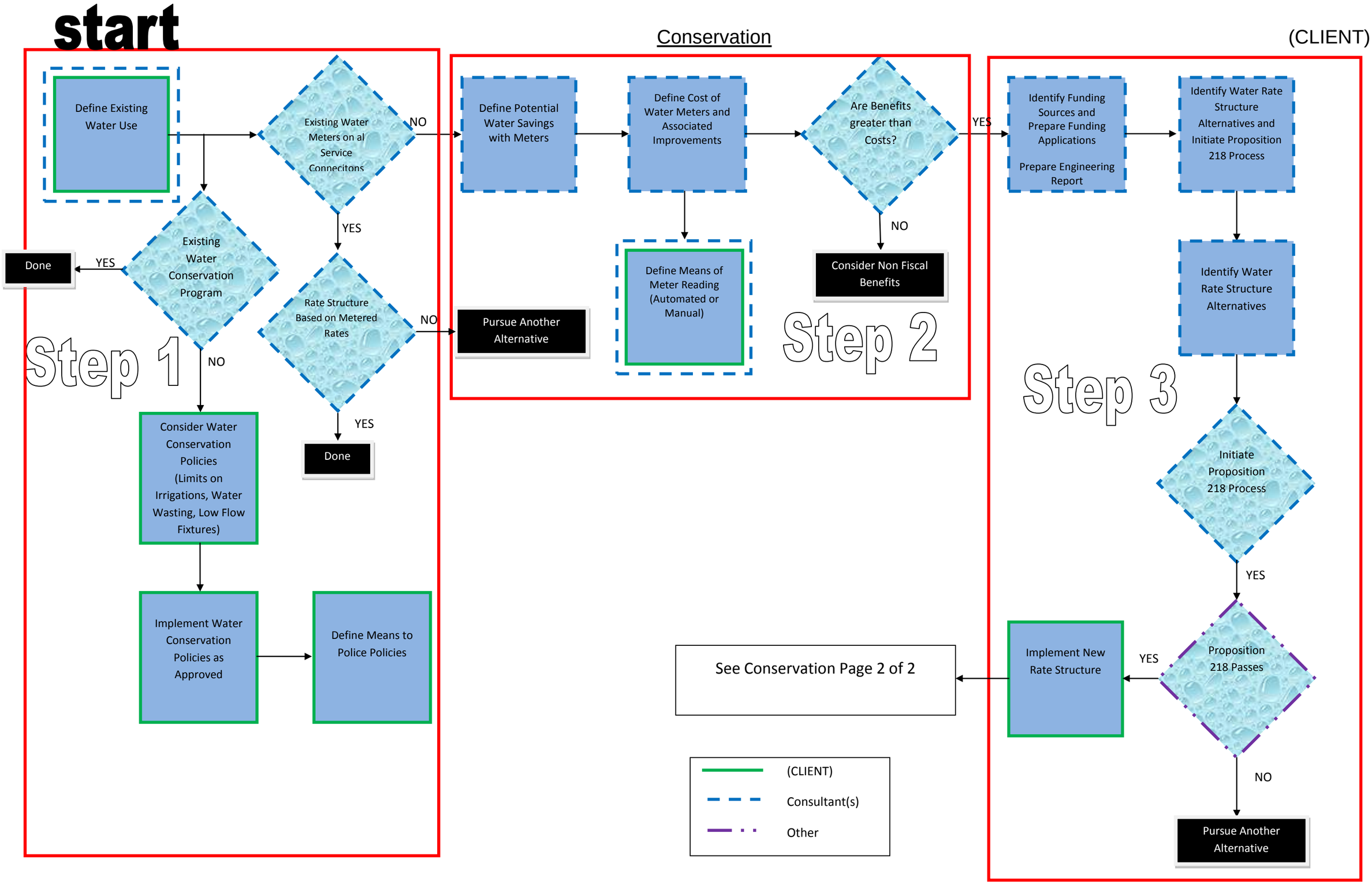
Step 9

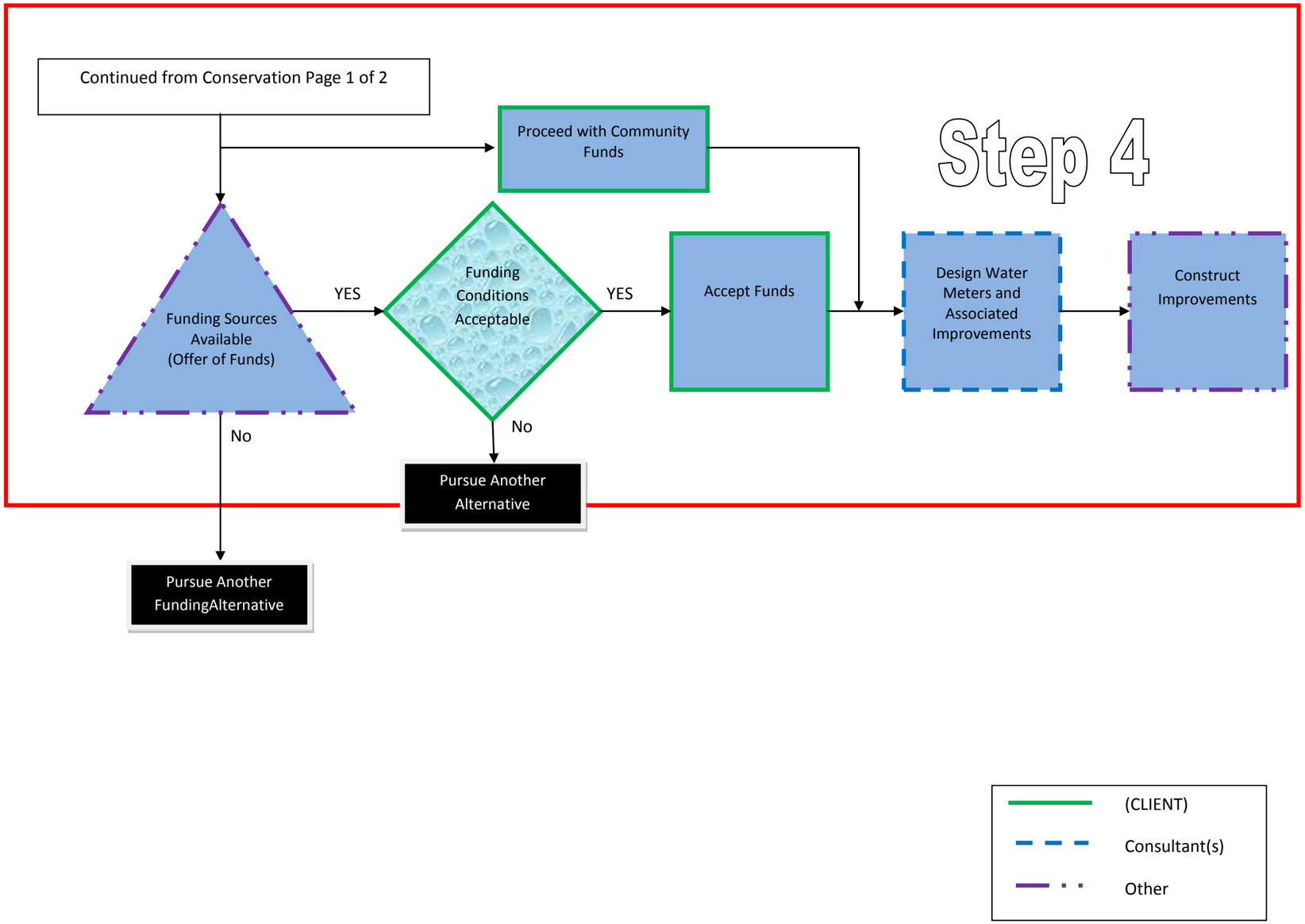




Conservation

(CLIENT)

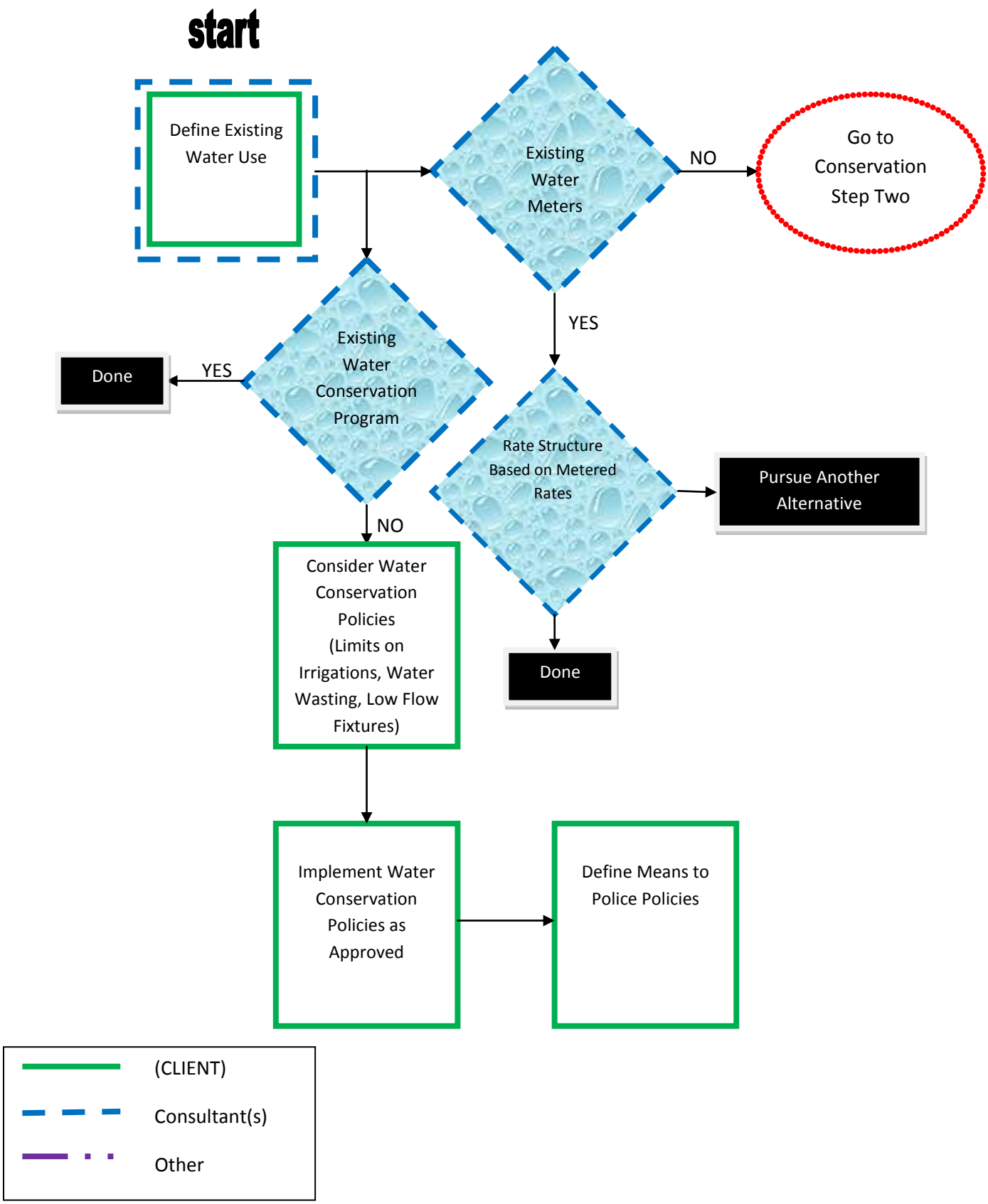



Continued from Conservation Page 1 of 2
Proceed with Community Funds
Step 4
Funding Sources Available (Offer of Funds)
YES
Funding Conditions Acceptable
YES
Accept Funds
Design Water Meters and Associated Improvements
Construct Improvements
No
No
Pursue Another Alternative
Pursue Another FundingAlternative
(CLIENT)
Consultant(s)
Other

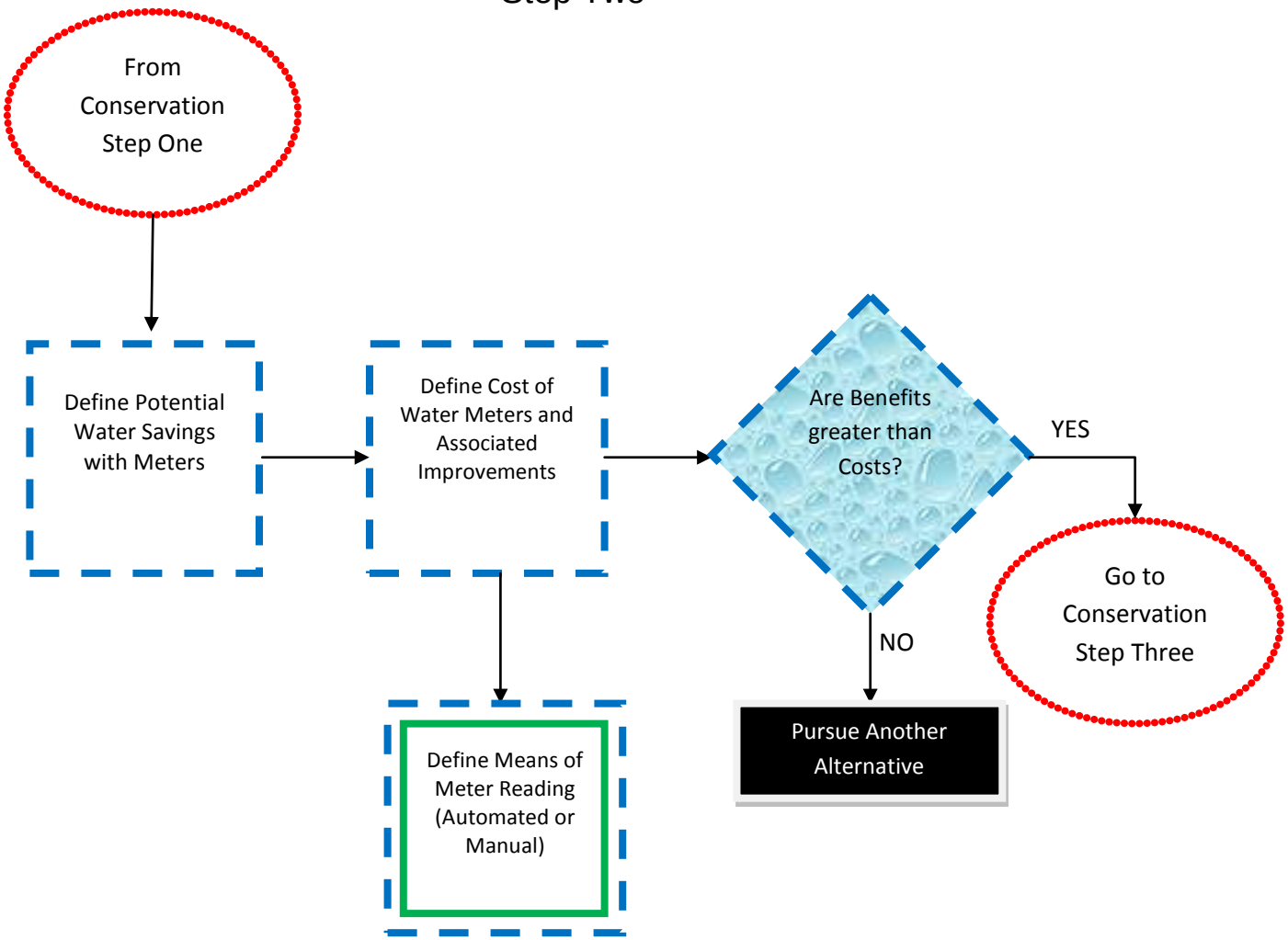
(CLIENT)

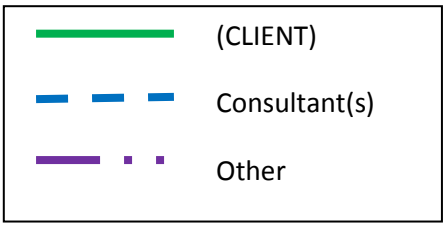
Conservation

Step One

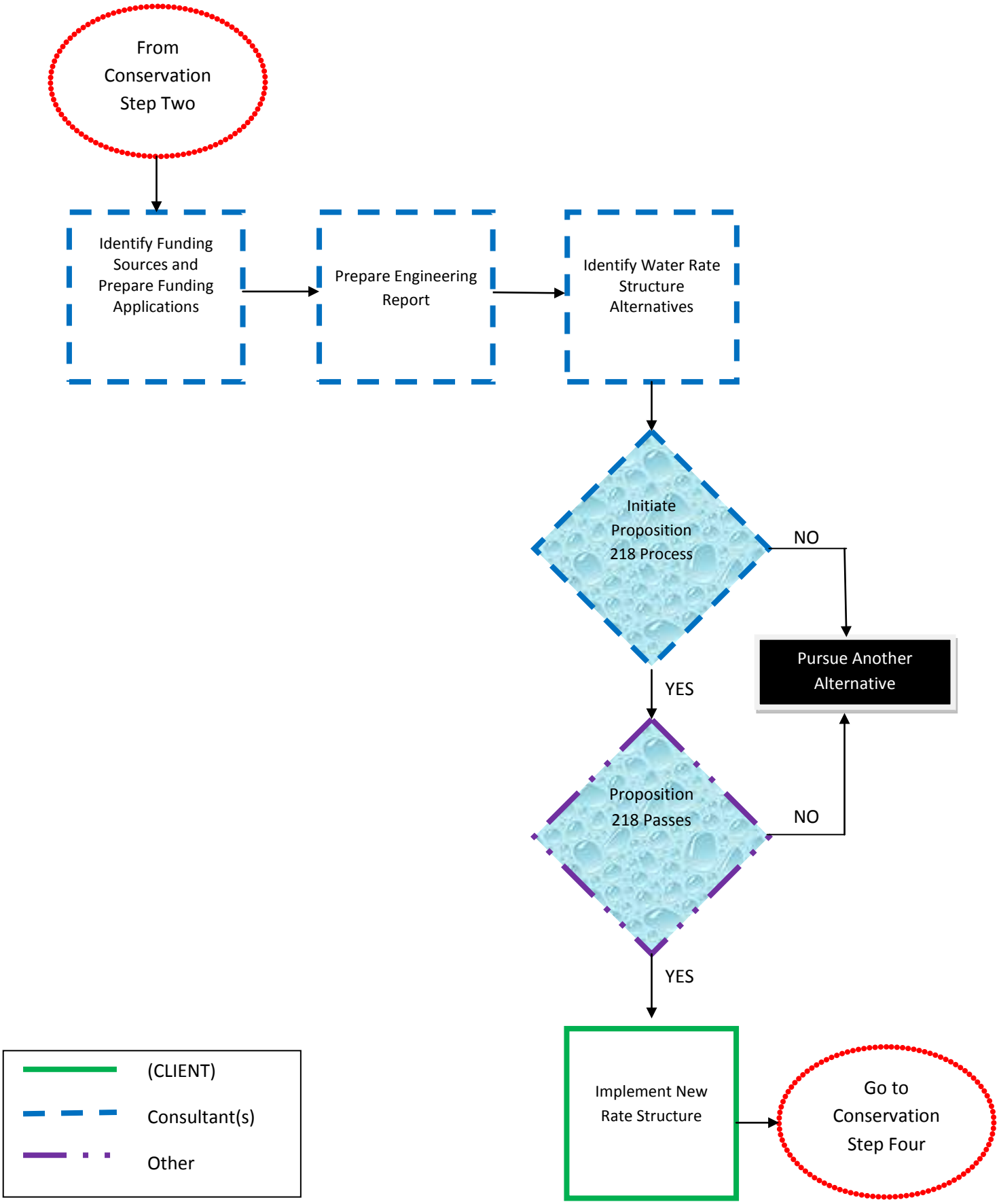


(CLIENT)
Conservation
Step Two

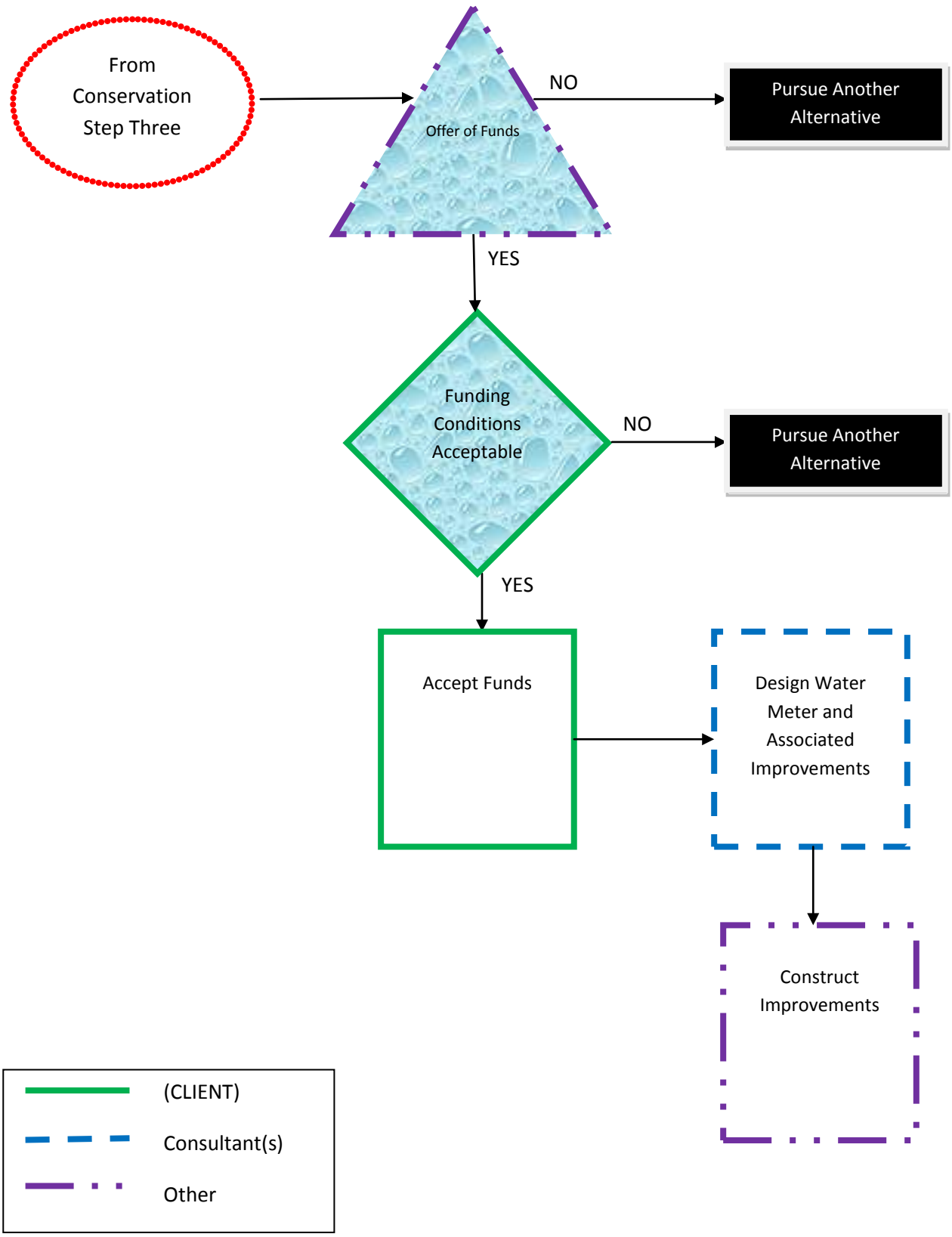


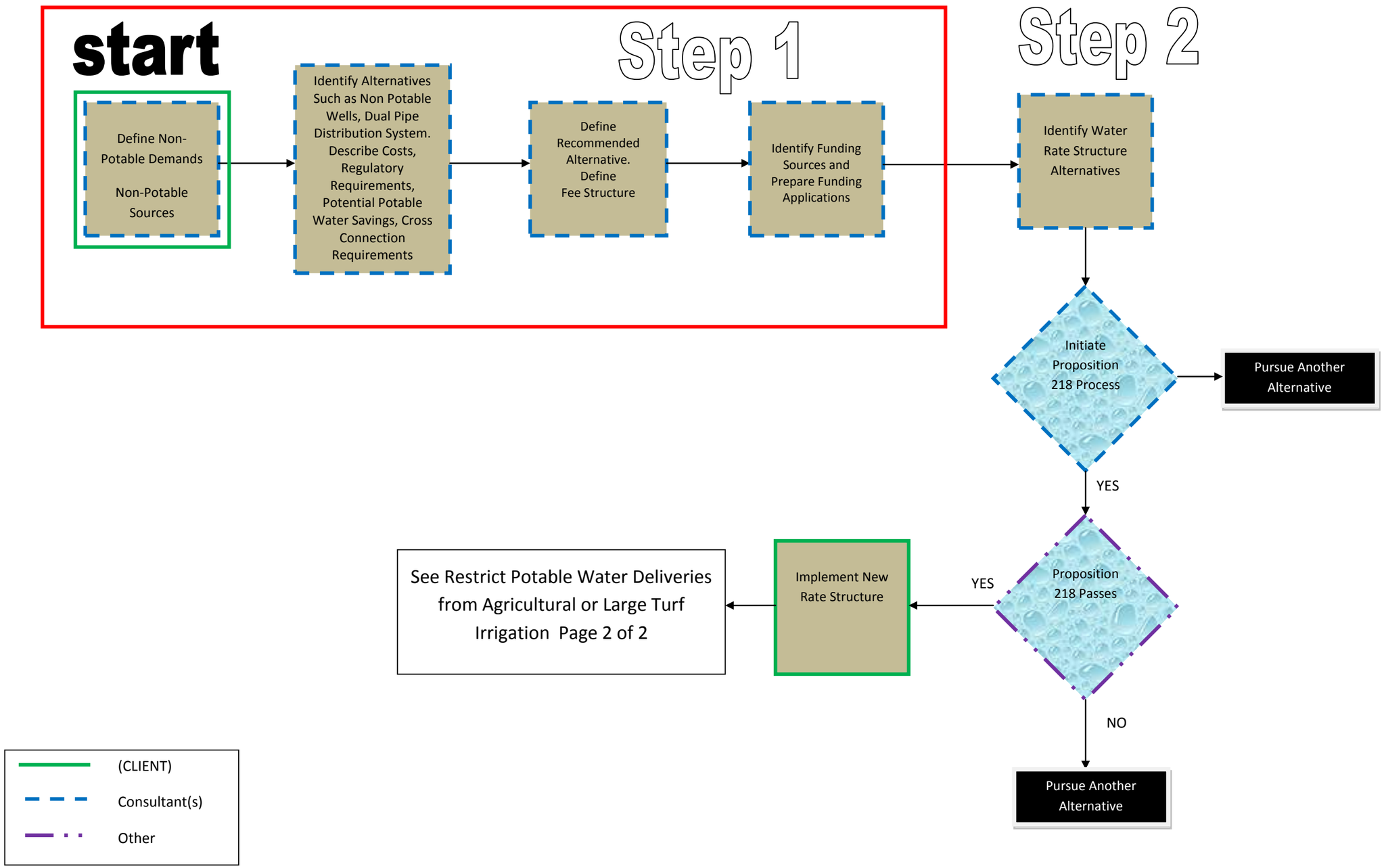


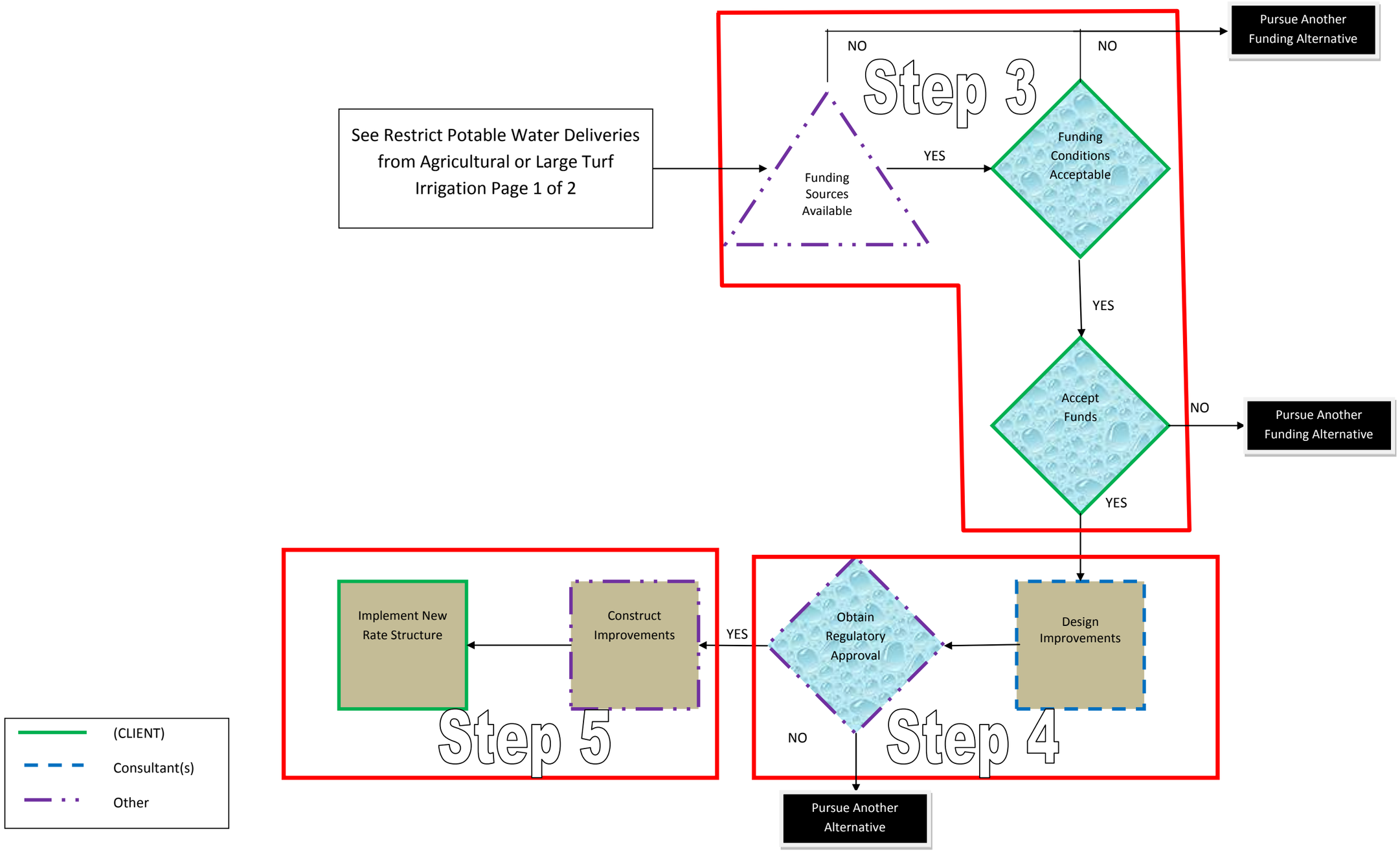
(CLIENT)
Conservation
Step Three



(CLIENT)
Conservation
Step Four



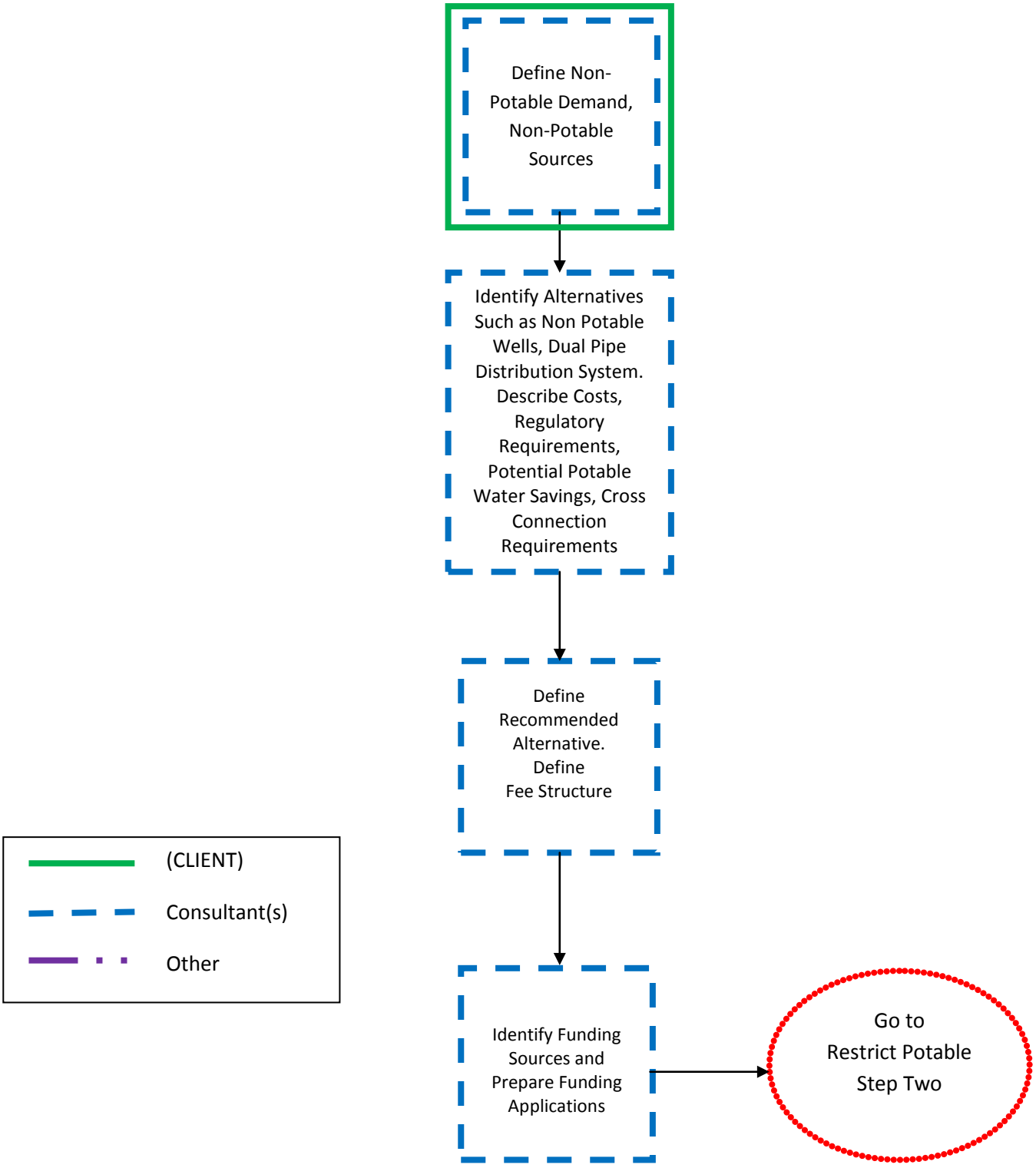

start
Step 1
Step 2
Define Non-Potable Demands
Non-Potable Sources
Identify Alternatives Such as Non Potable Wells, Dual Pipe Distribution System. Describe Costs, Regulatory Requirements, Potential Potable Water Savings, Cross Connection Requirements
Define Recommended Alternative. Define Fee Structure
Identify Funding Sources and Prepare Funding Applications
Identify Water Rate Structure Alternatives
Initiate Proposition 218 Process
Pursue Another Alternative
YES
Proposition 218 Passes
YES
Implement New Rate Structure
See Restrict Potable Water Deliveries from Agricultural or Large Turf Irrigation Page 2 of 2
NO
Pursue Another Alternative
(CLIENT)
Consultant(s)
Other


See Restrict Potable Water Deliveries from Agricultural or Large Turf Irrigation Page 1 of 2
Step 3
Funding Sources Available
NO
YES
Funding Conditions Acceptable
NO
Pursue Another Funding Alternative
YES
Accept Funds
NO
Pursue Another Funding Alternative
YES
Step 4
Design Improvements
Obtain Regulatory Approval
NO
Pursue Another Alternative
YES
Step 5
Construct Improvements
Implement New Rate Structure
(CLIENT)
Consultant(s)
Other

(CLIENT)

Restrict Potable Water Deliveries from Agriculture or Large Turf Irrigation

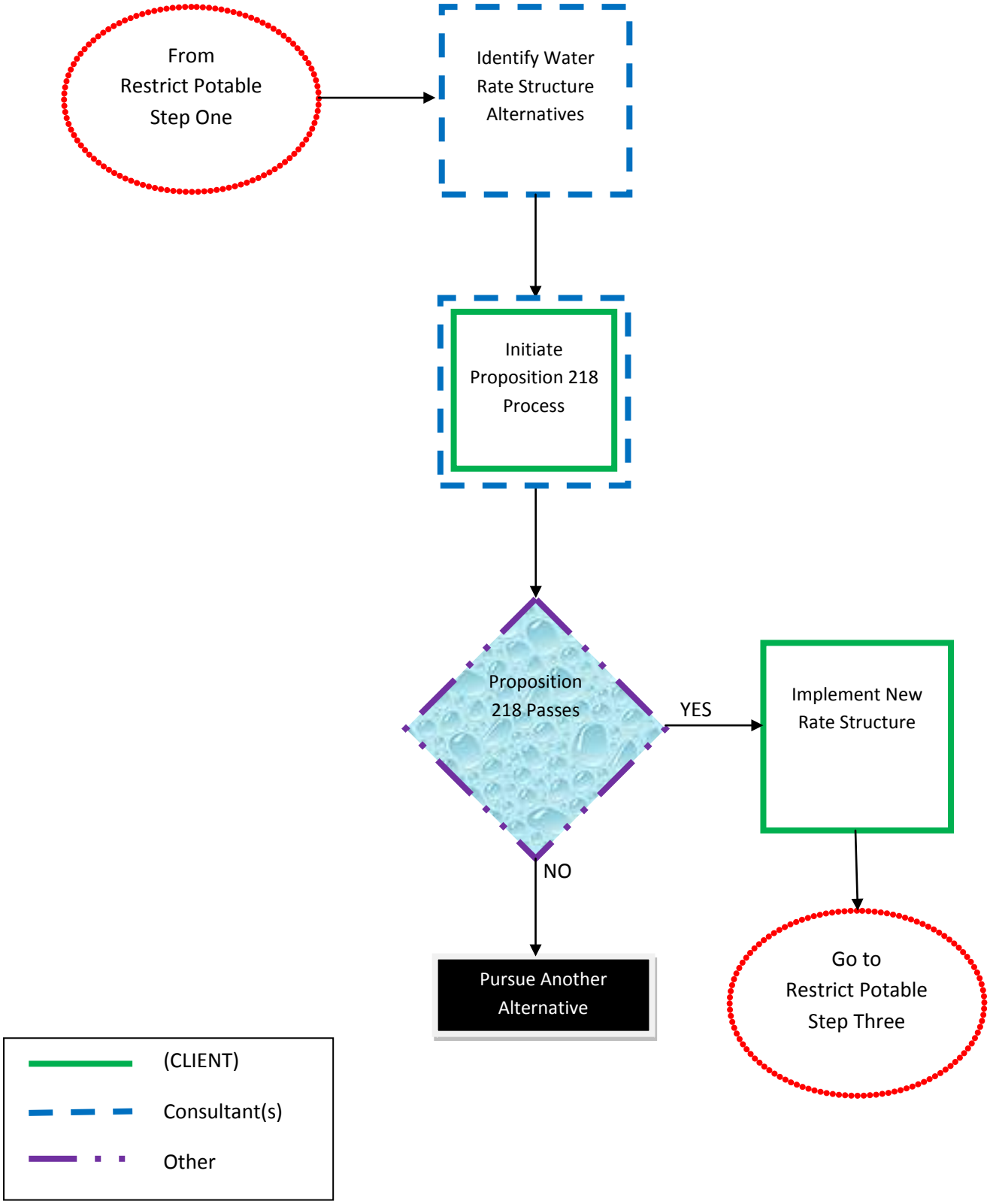
Step One



(CLIENT)

Restrict Potable Water Deliveries from Agriculture or Large Turf Irrigation

Step Two



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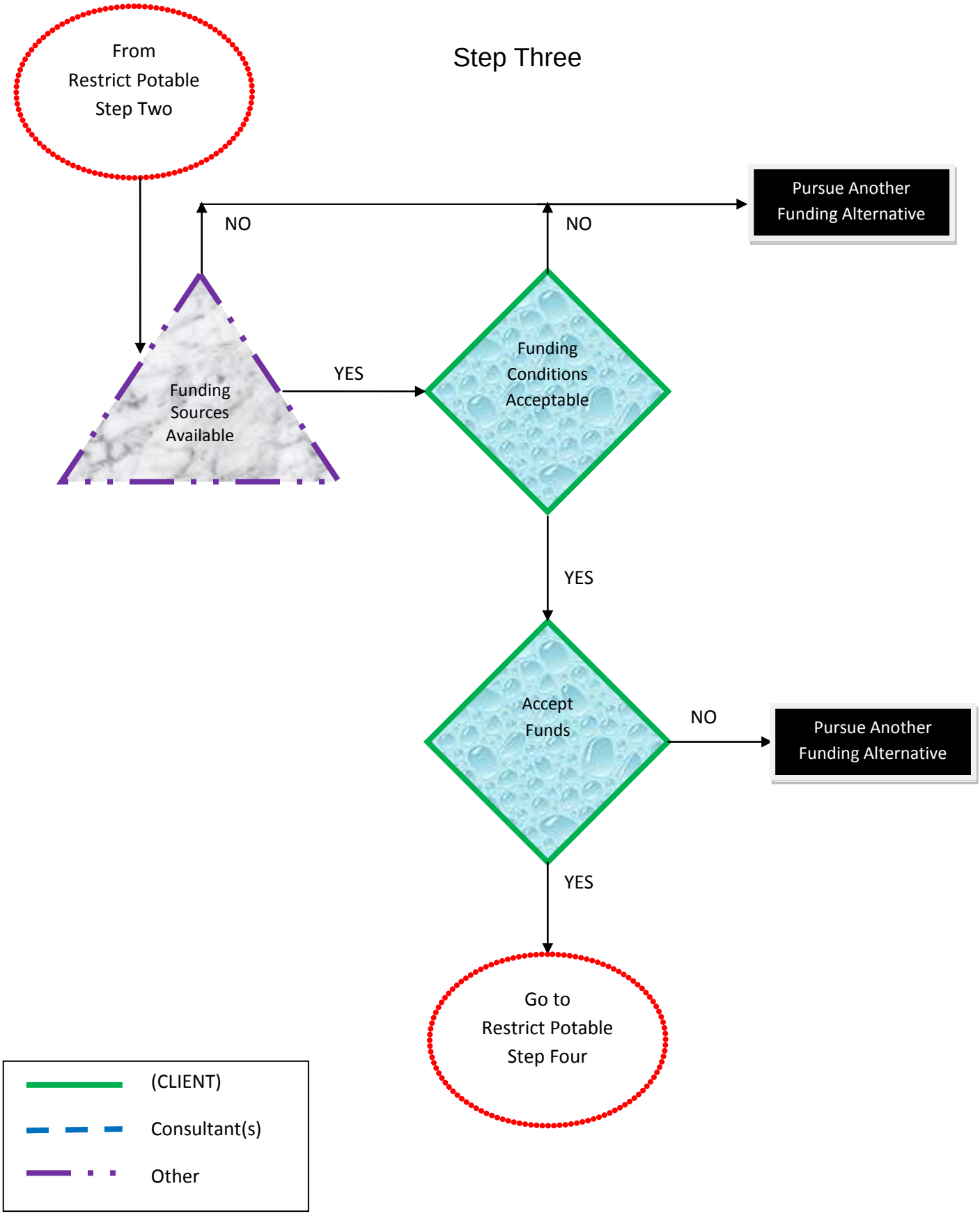
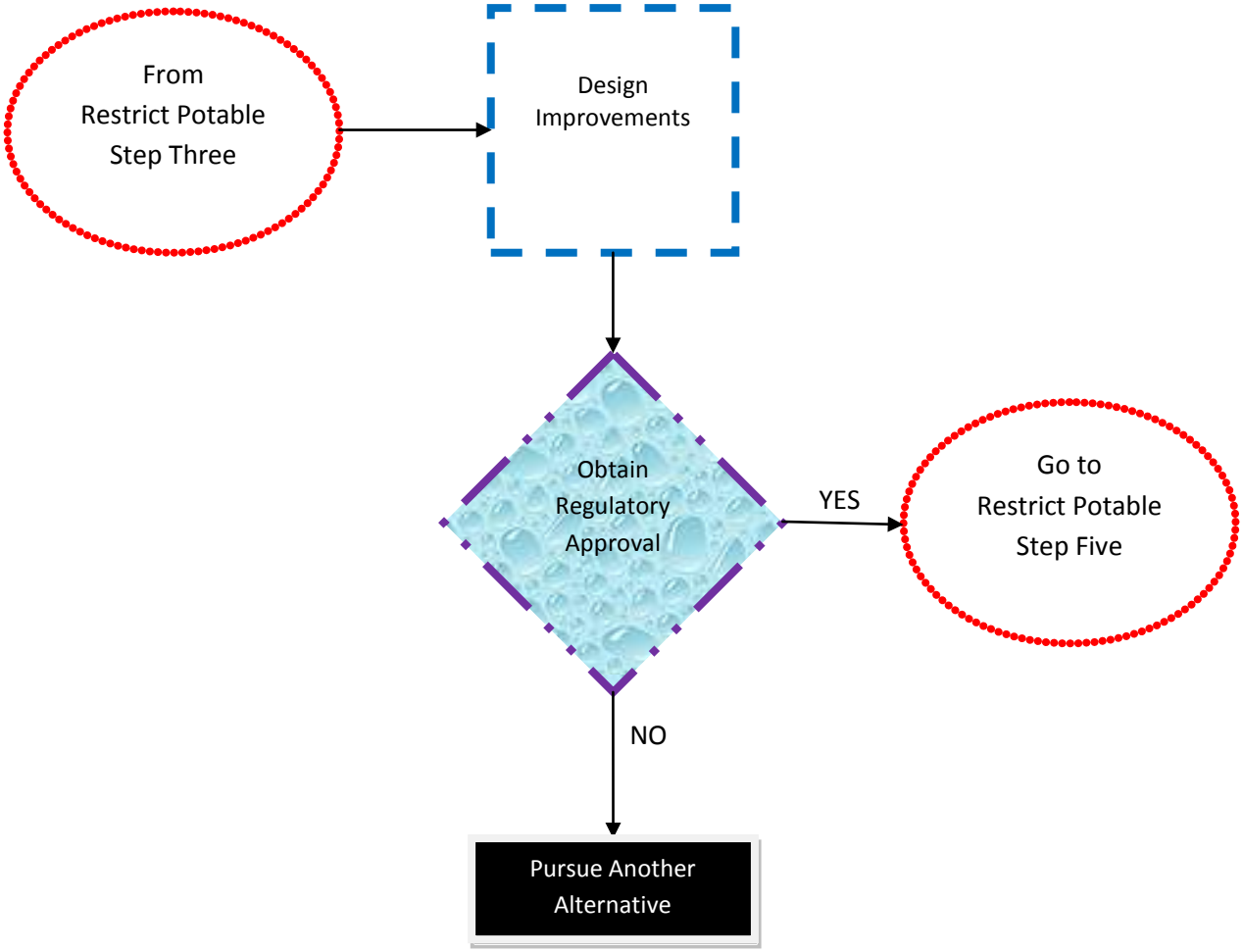
Restrict Potable Water Deliveries from Agriculture or Large Turf Irrigation

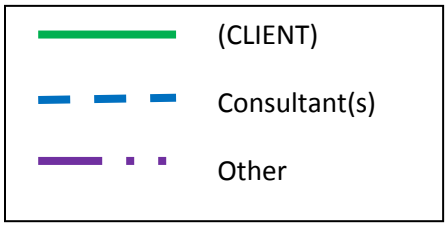


(CLIENT)

Restrict Potable Water Deliveries from Agriculture or Large Turf Irrigation

Step Four

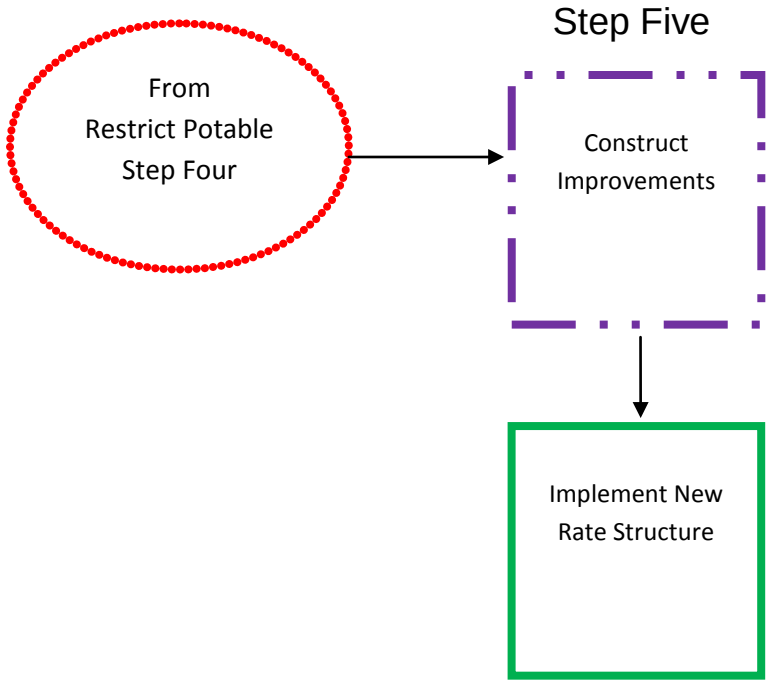


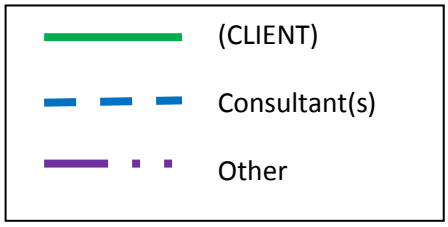


(CLIENT)

Restrict Potable Water Deliveries from Agriculture or Large Turf Irrigation

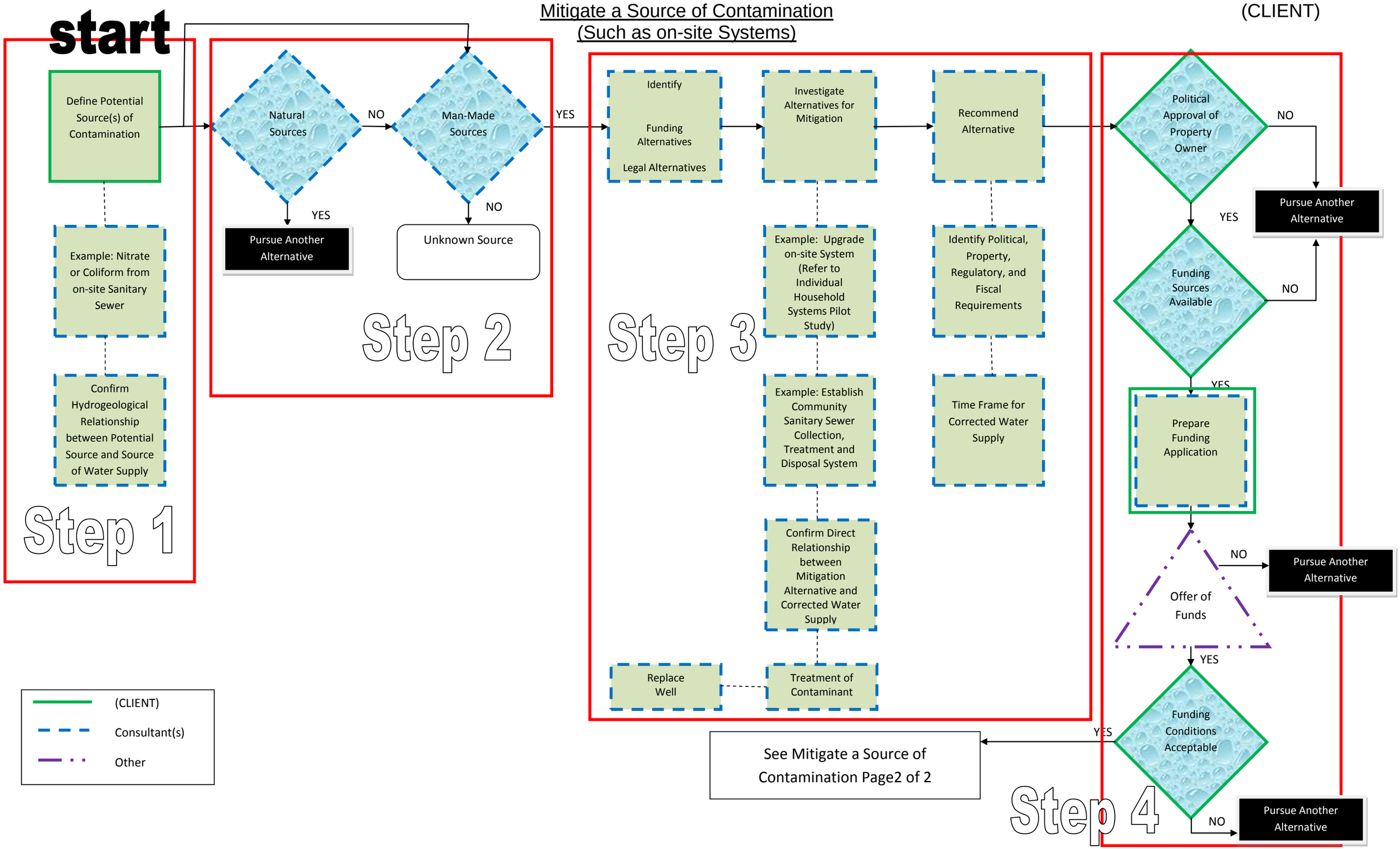
Step Five





Mitigate a Source of Contamination
(Such as on-site Systems)

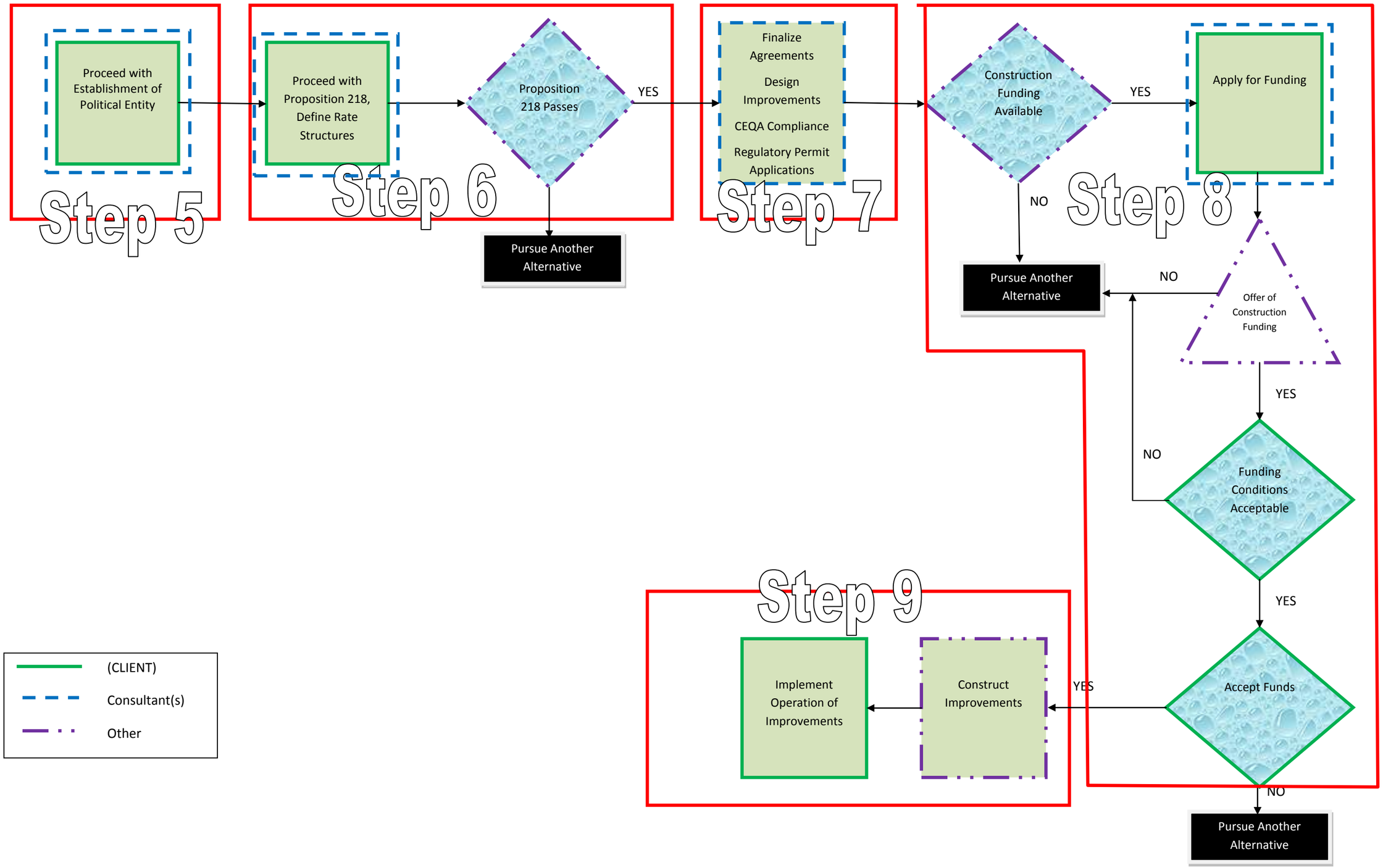
(CLIENT)



See Mitigate a Source of Contamination Page 1 of 2

Mitigate a Source of Contamination (Such as on-site Systems)

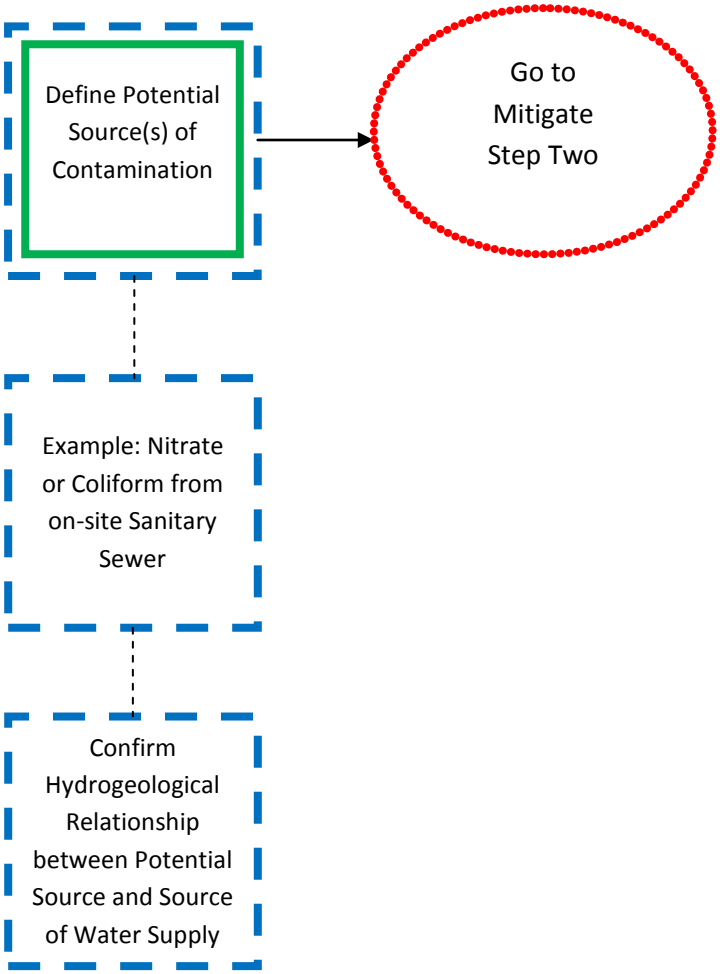
(CLIENT)

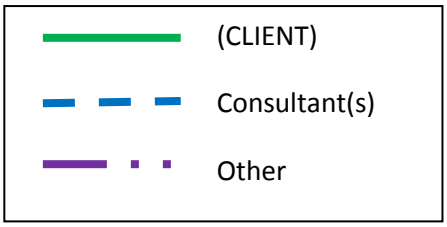


(CLIENT)

Mitigate a Source of Contamination

Step One

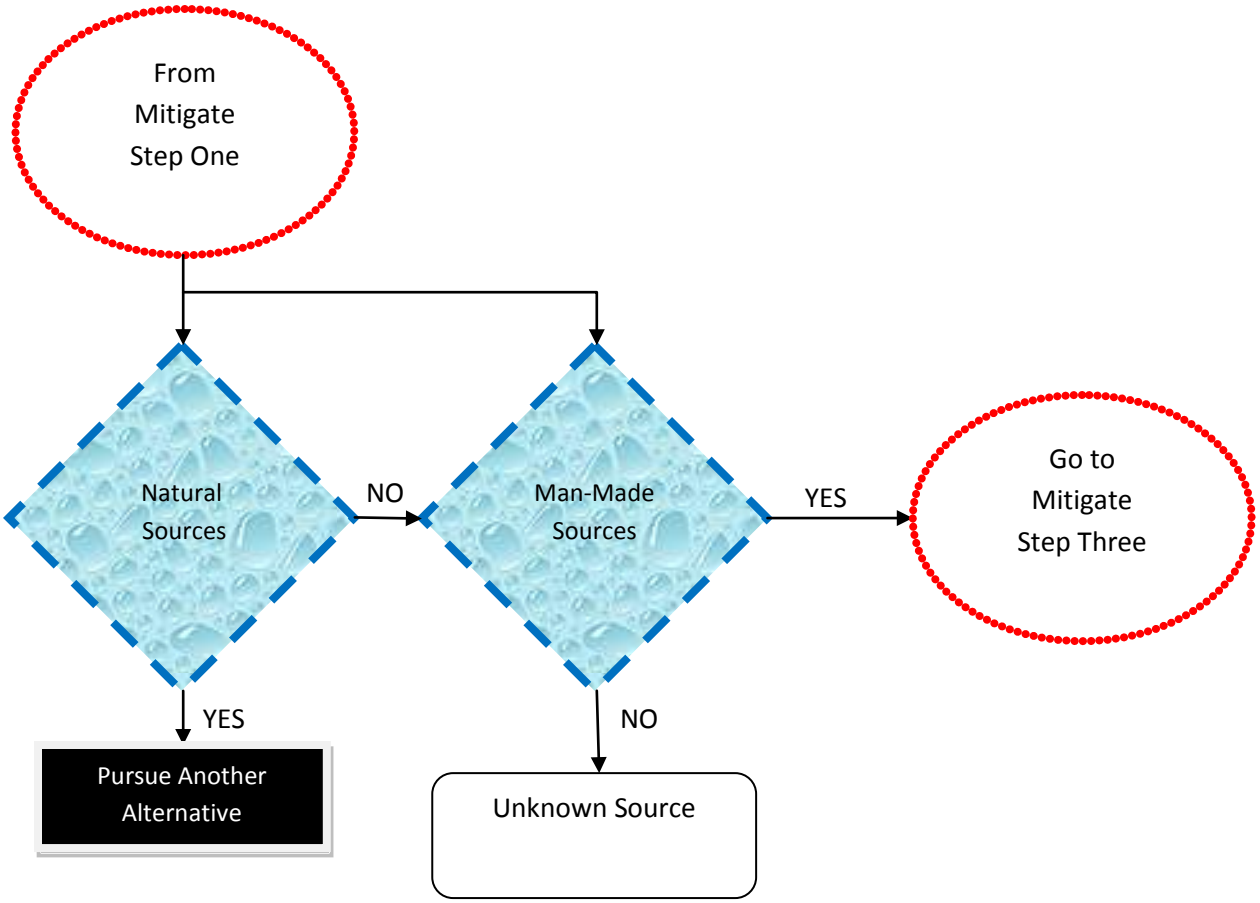


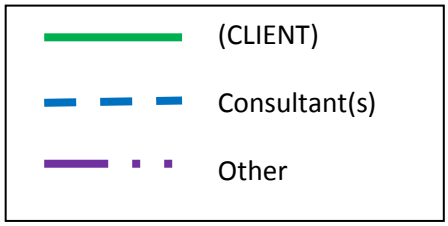


(CLIENT)

Mitigate a Source of Contamination

Step Two

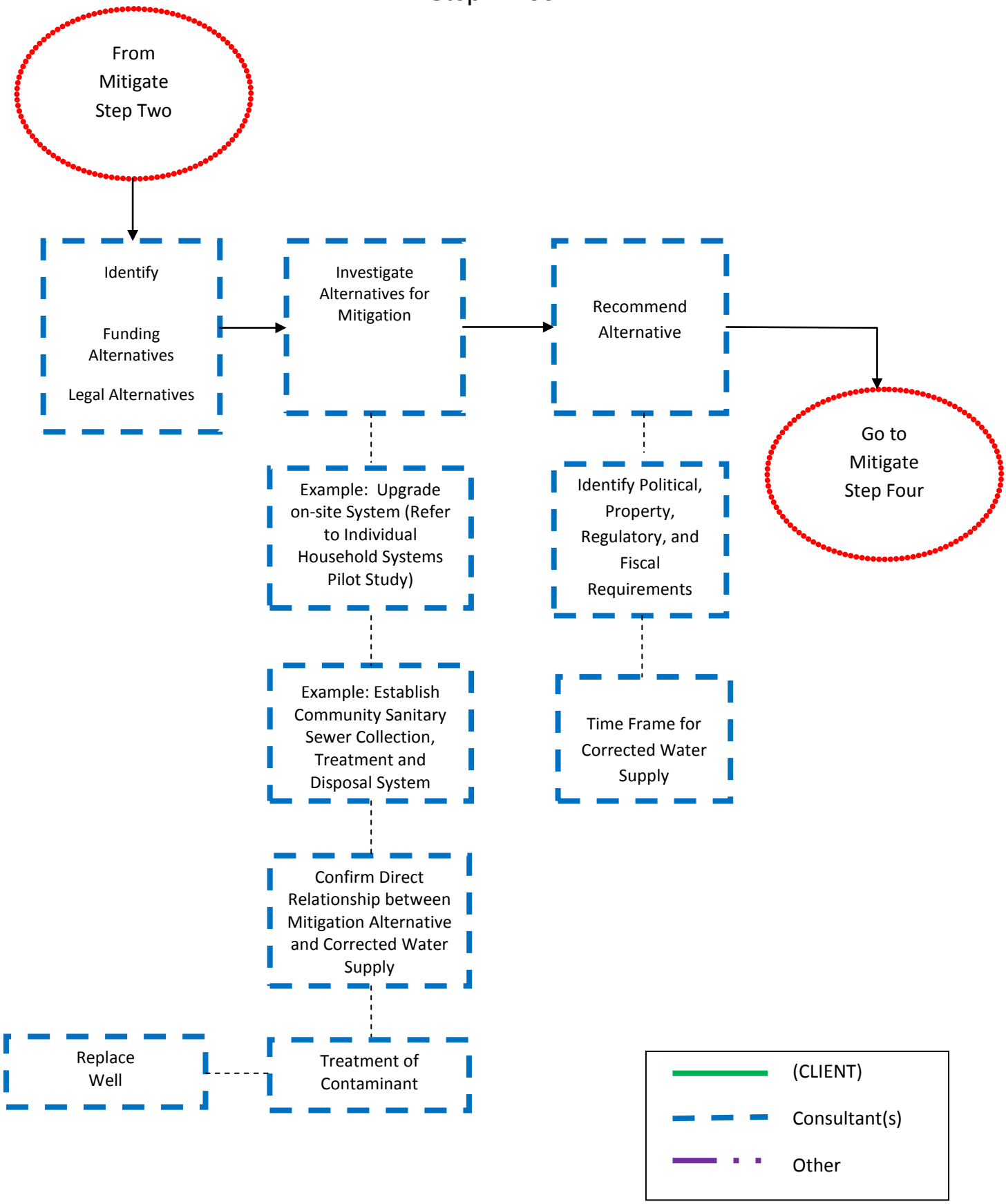




(CLIENT)

Mitigate a Source of Contamination

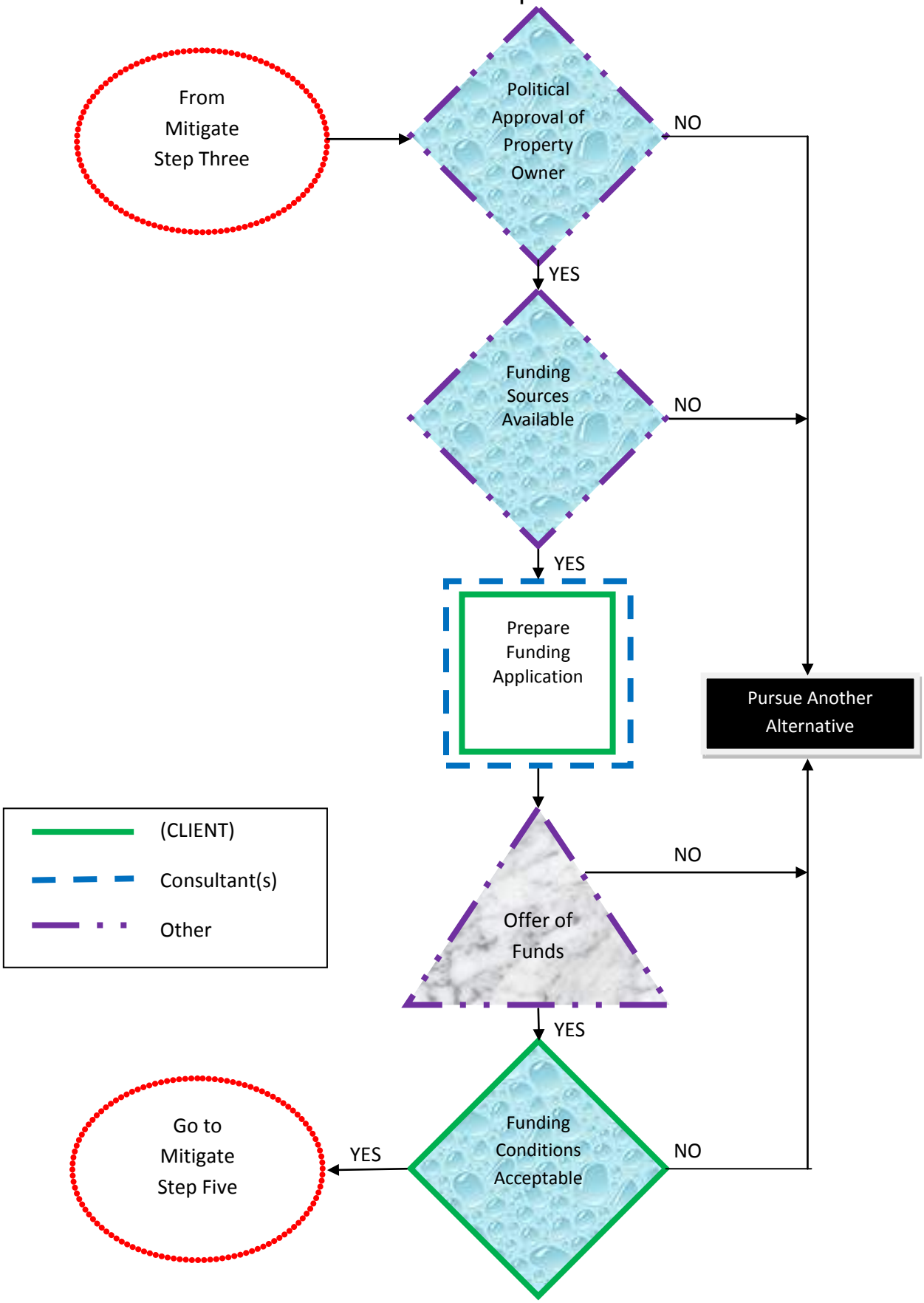
Step Three



(CLIENT)

Mitigate a Source of Contamination

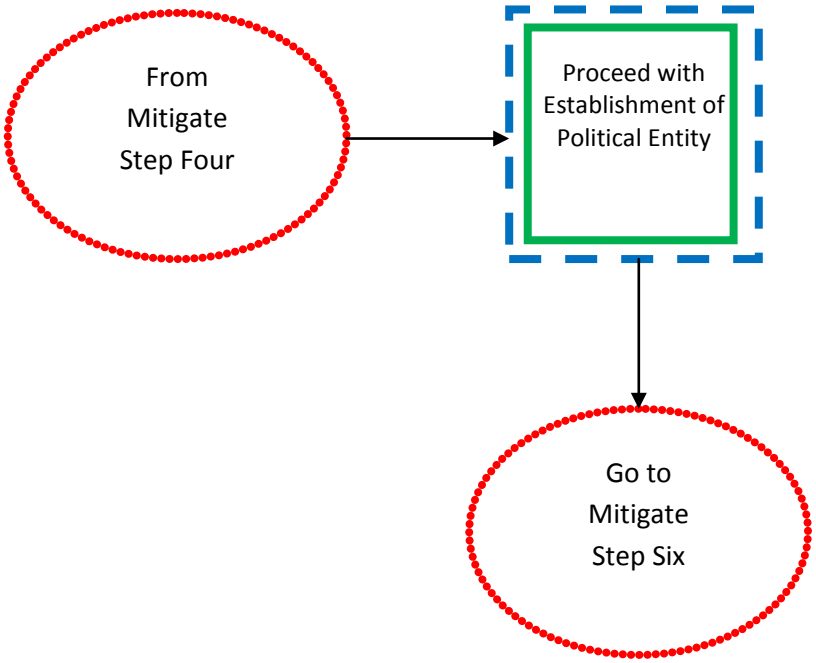
Step Four

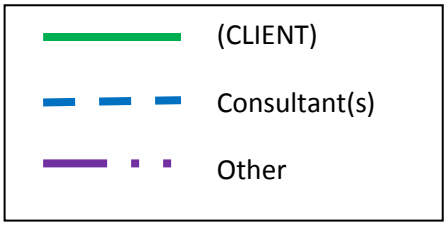


(CLIENT)

Mitigate a Source of Contamination

Step Five

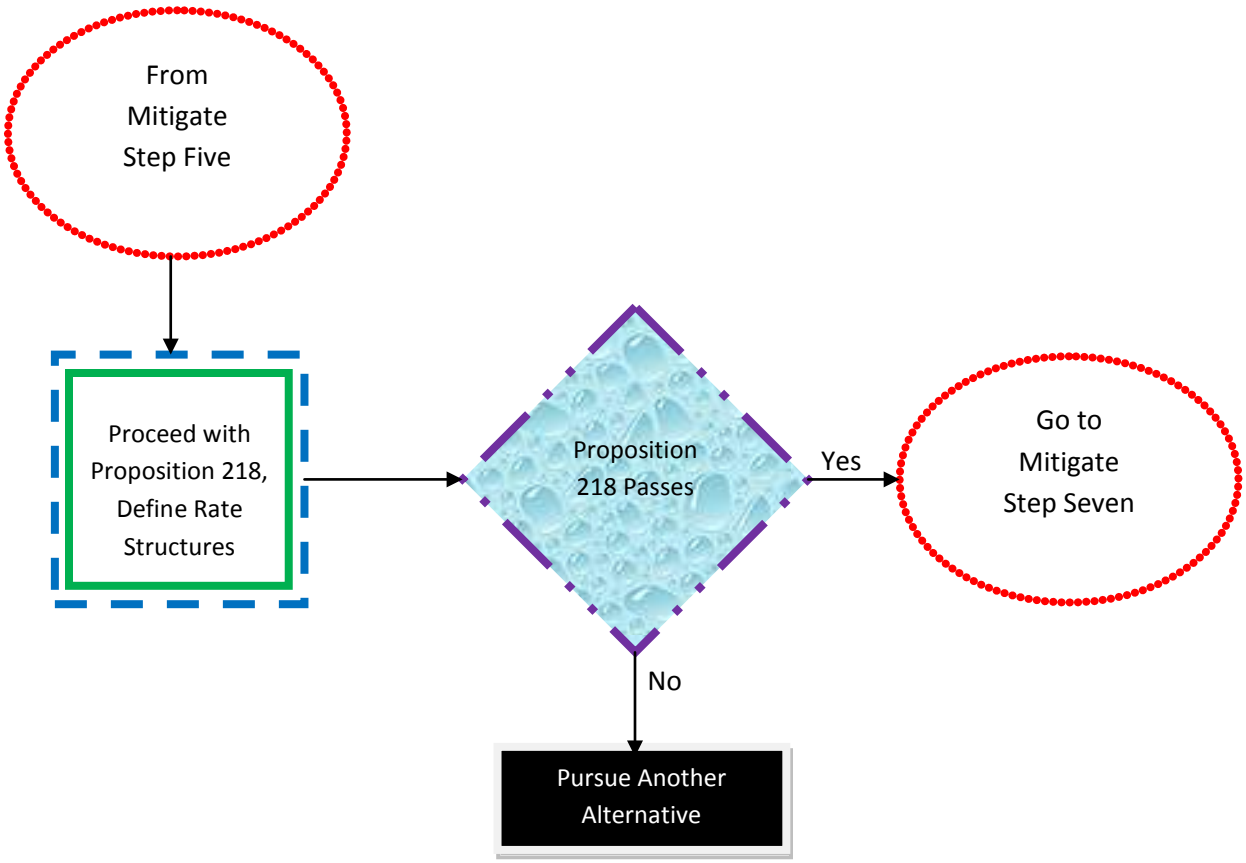


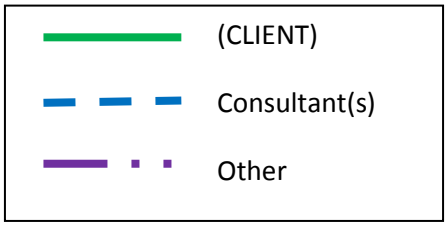


(CLIENT)

Mitigate a Source of Contamination

Step Six

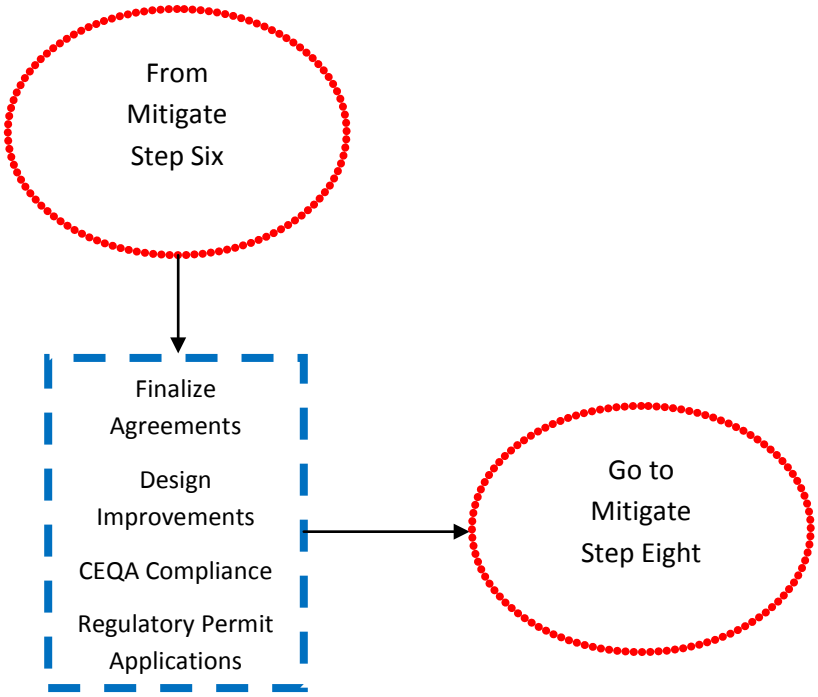


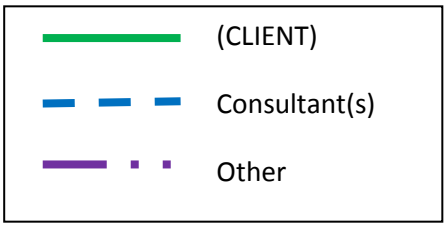


(CLIENT)

Mitigate a Source of Contamination

Step Seven

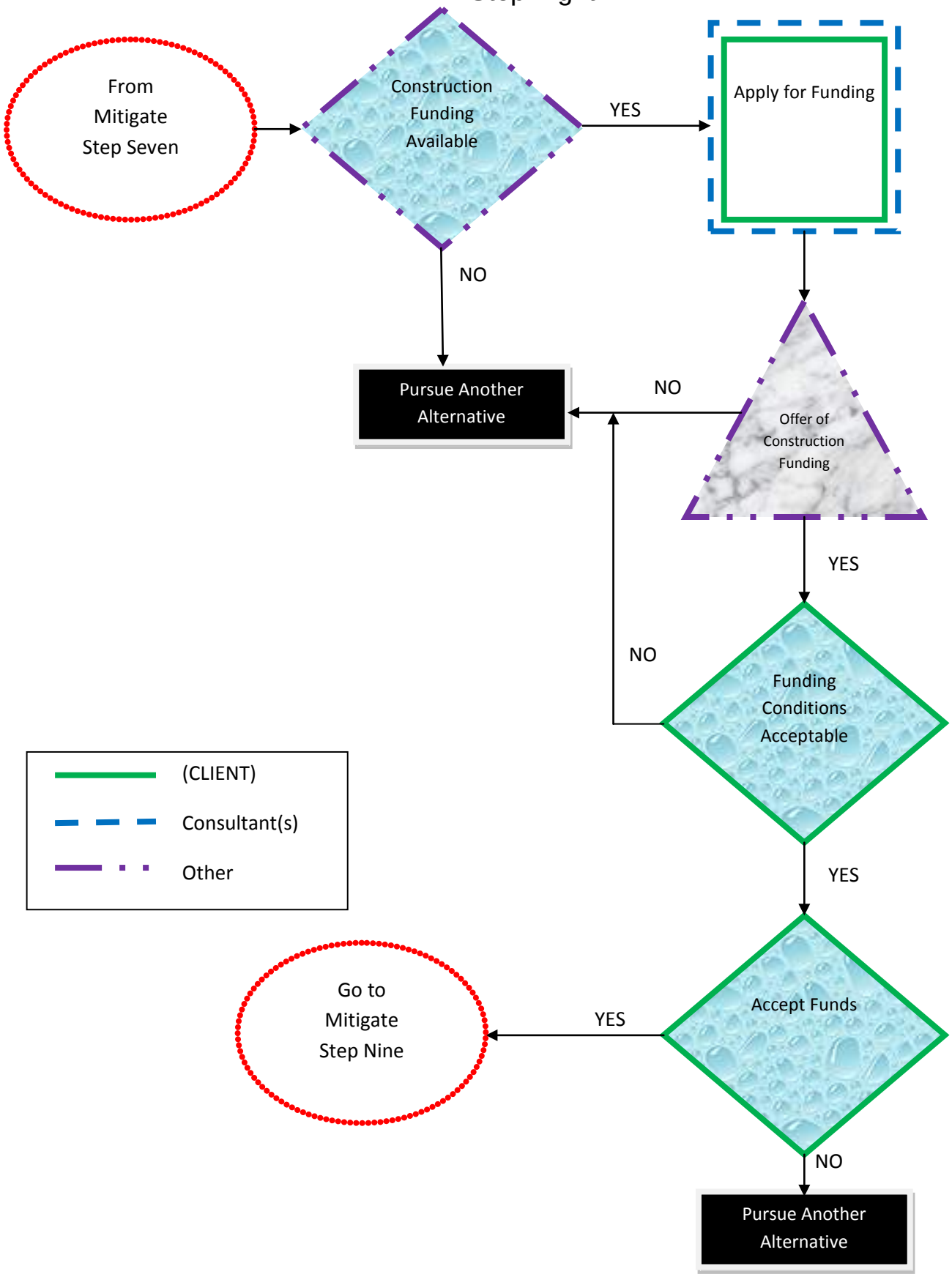




(CLIENT)

Mitigate a Source of Contamination

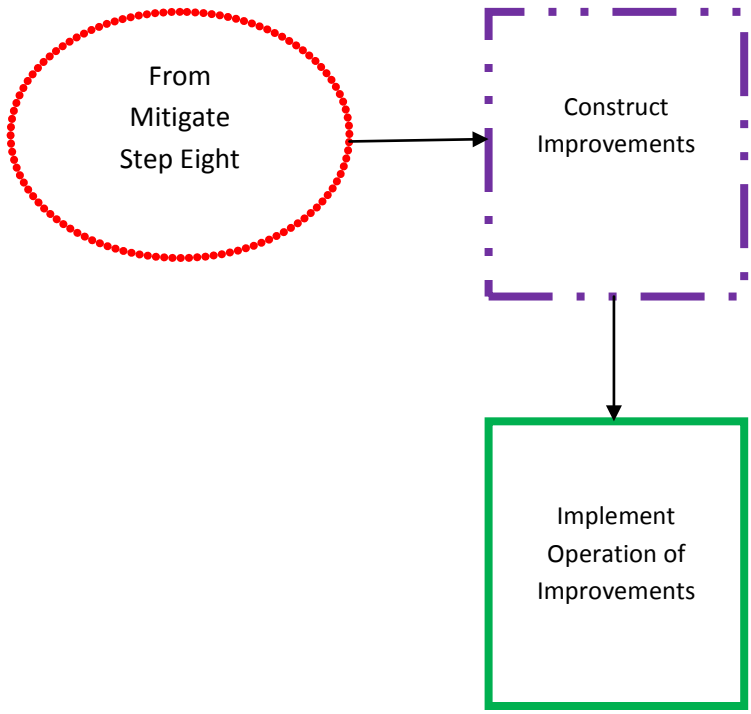
Step Eight

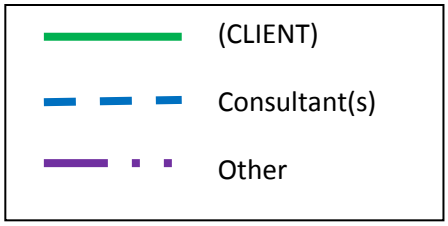


(CLIENT)

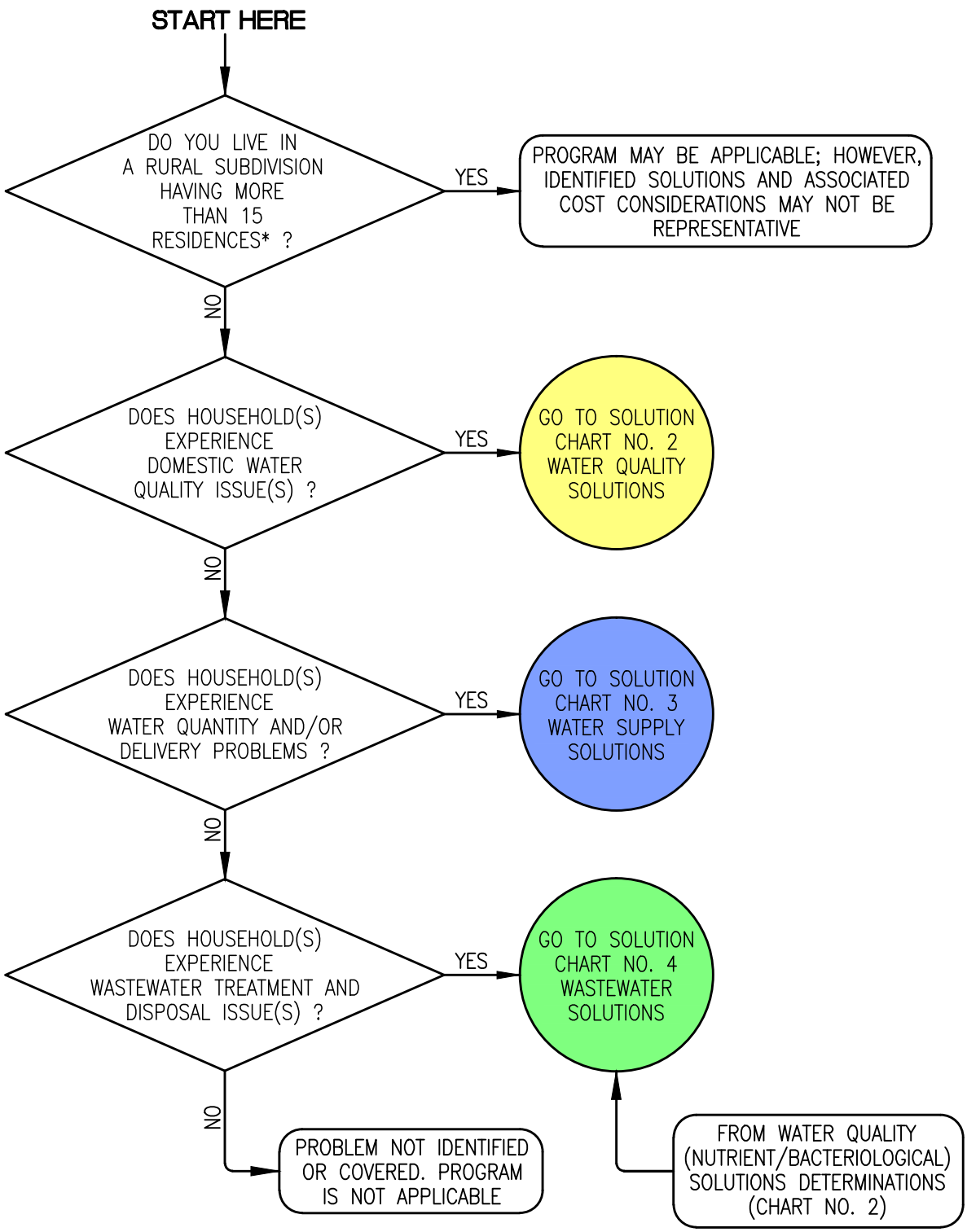
Mitigate a Source of Contamination

Step Nine





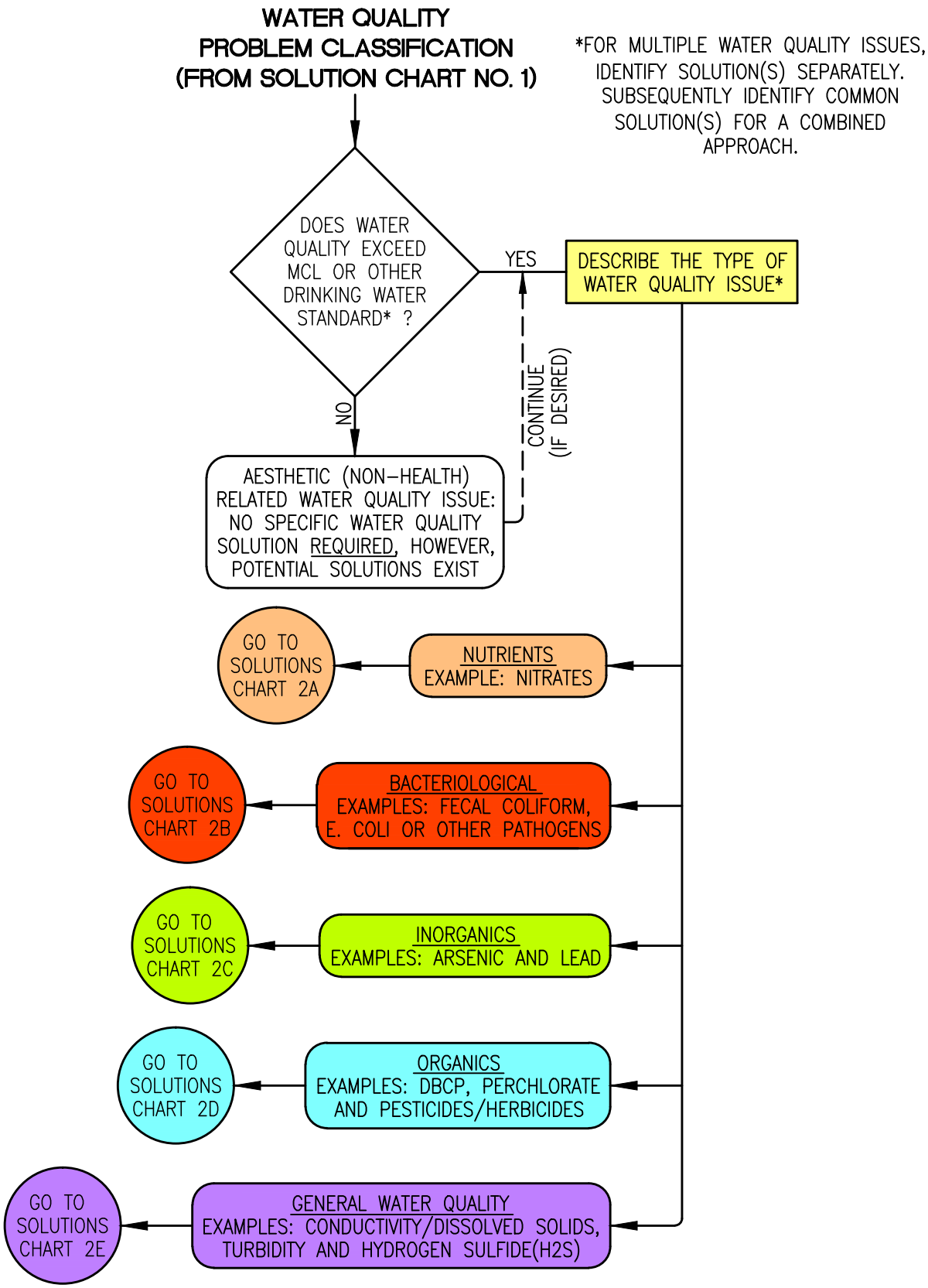
INDIVIDUAL HOUSEHOLDS DECISION TREES



*THIS PROGRAM IS SPECIFICALLY DESIGNED FOR INDIVIDUAL HOUSEHOLDS OR GROUPS OF HOUSEHOLDS CONSISTING OF 15 RESIDENCES OR LESS

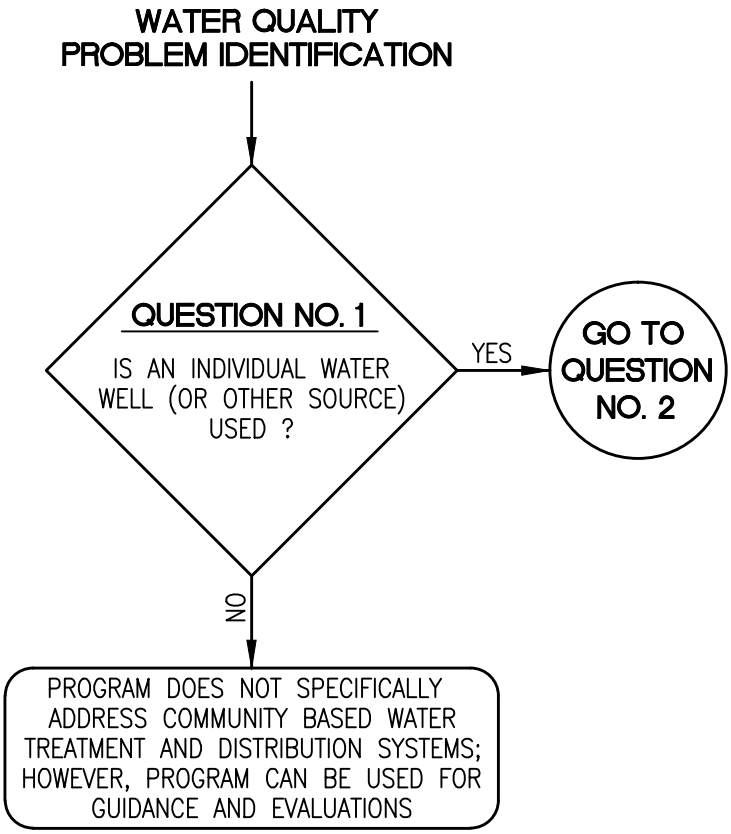
SOLUTION CHART NO. 1 - INITIAL CLASSIFICATION
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\8.5 x 11 SOLUTION CHART NO. 1.Dwg



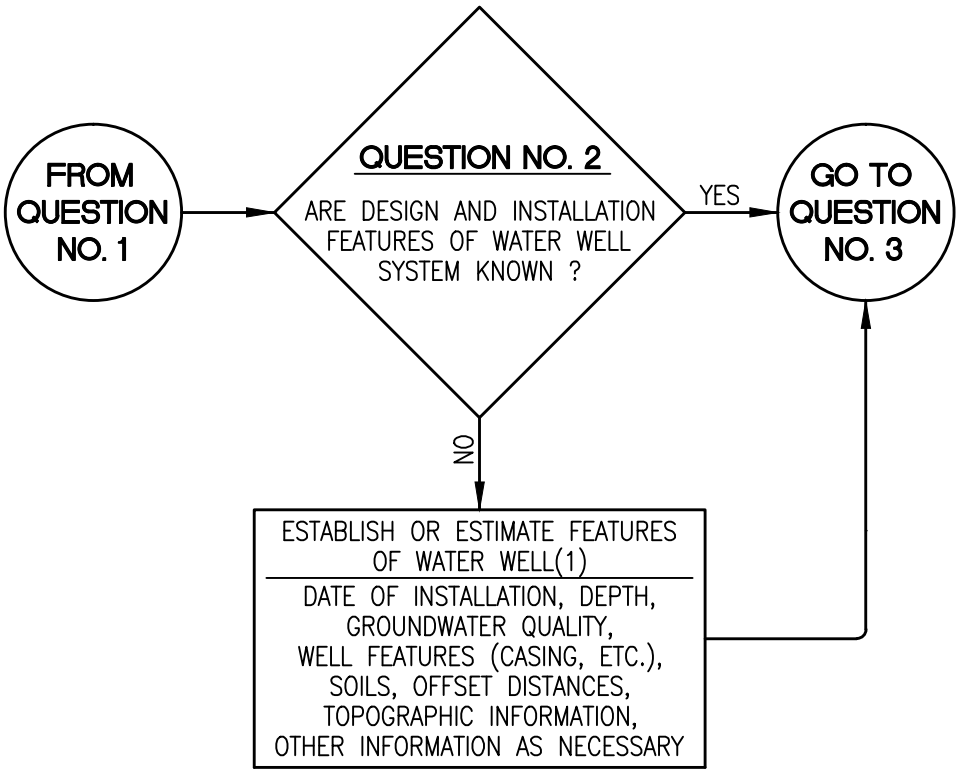
SOLUTION CHART NO. 2 - WATER QUALITY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\8.5 x 11 SOLUTION CHART NO. 2.Dwg



QUESTION NO. 1

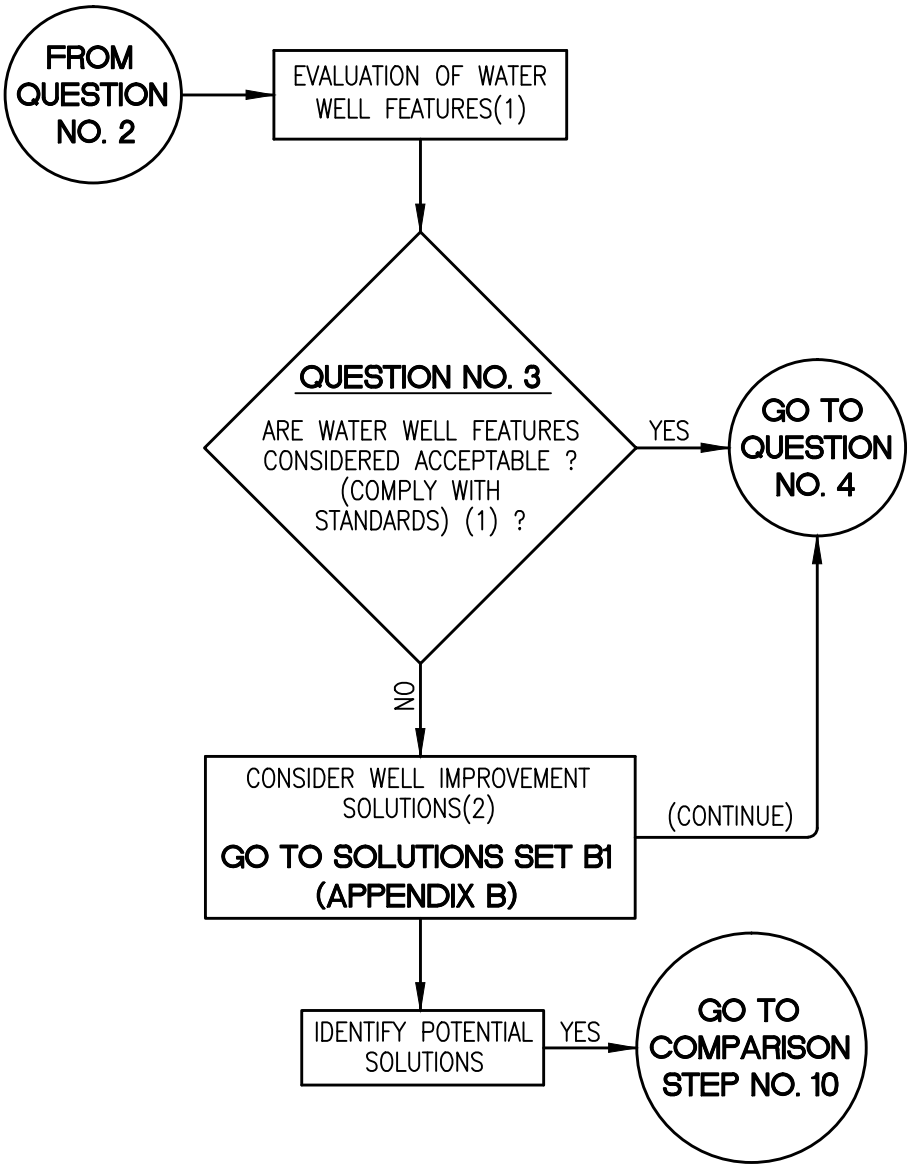
SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



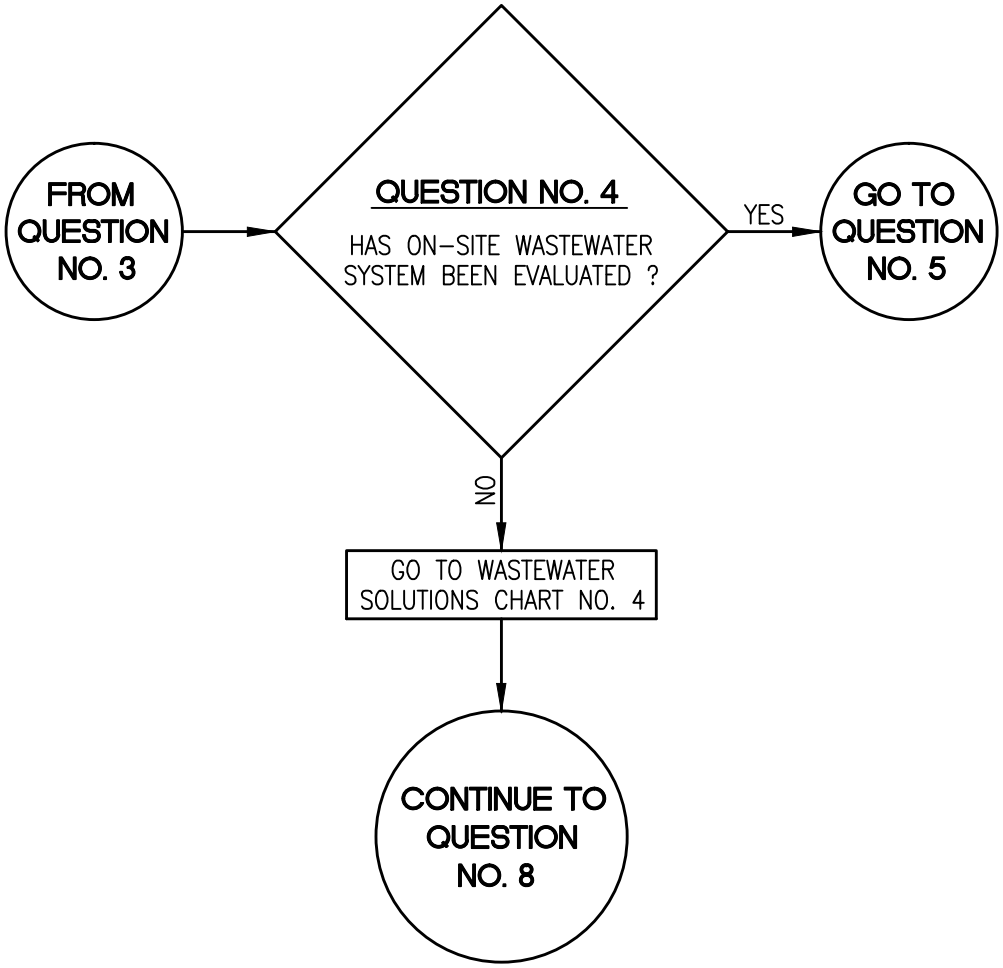
NOTES:

1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

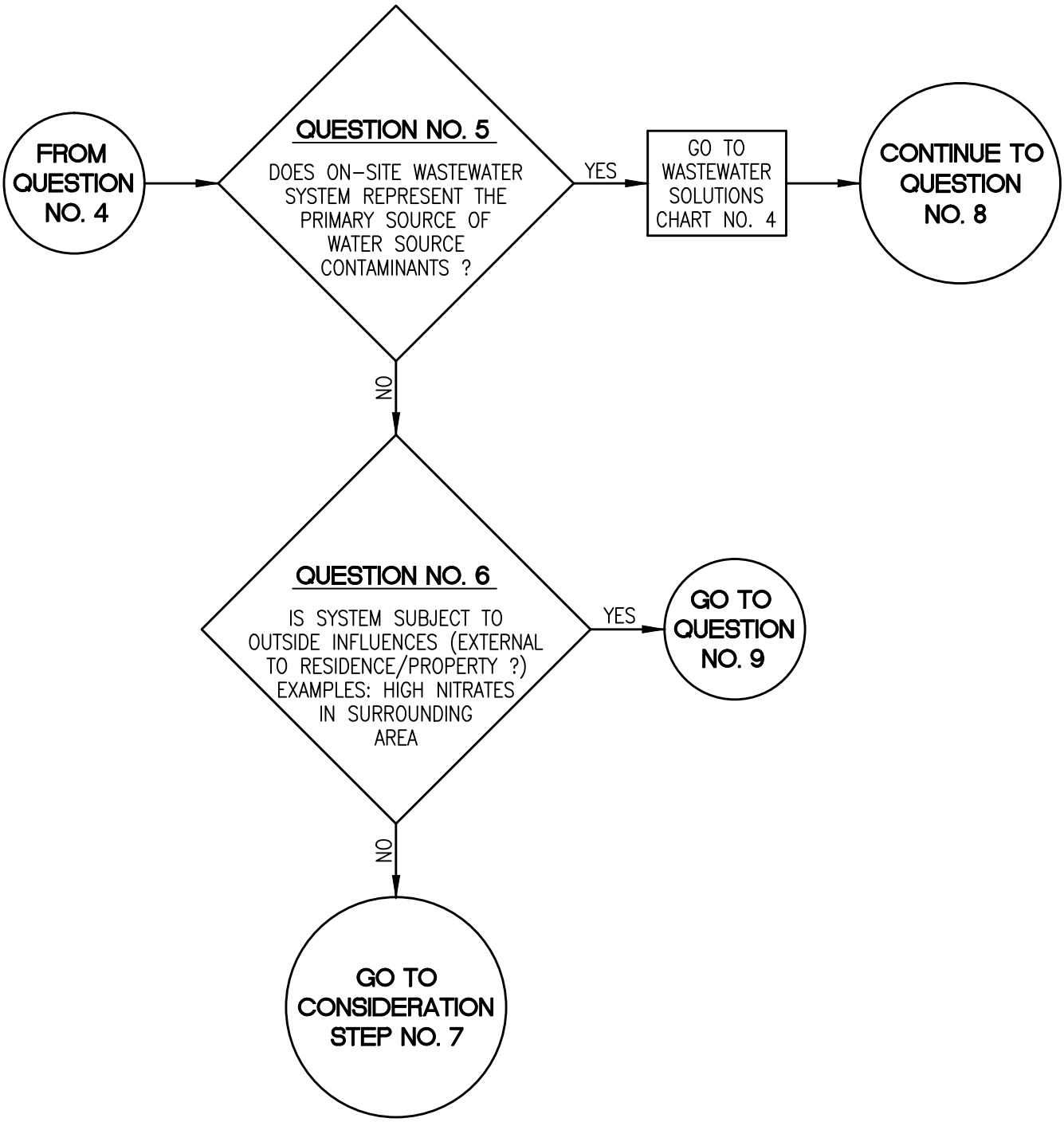
QUESTION NO. 3

SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 4

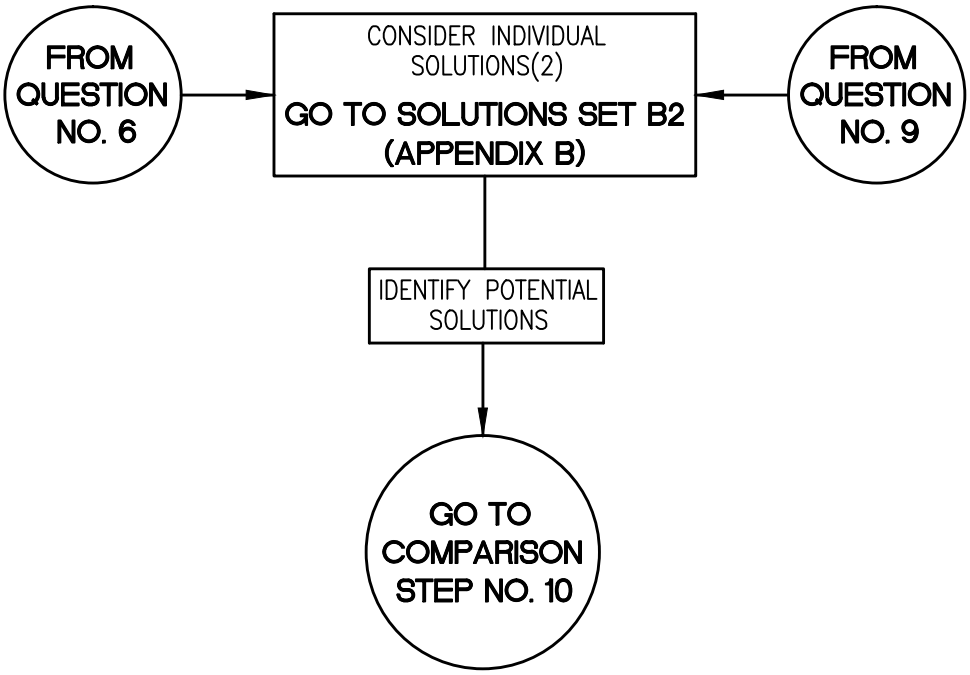
SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTIONS NO. 5 AND NO. 6

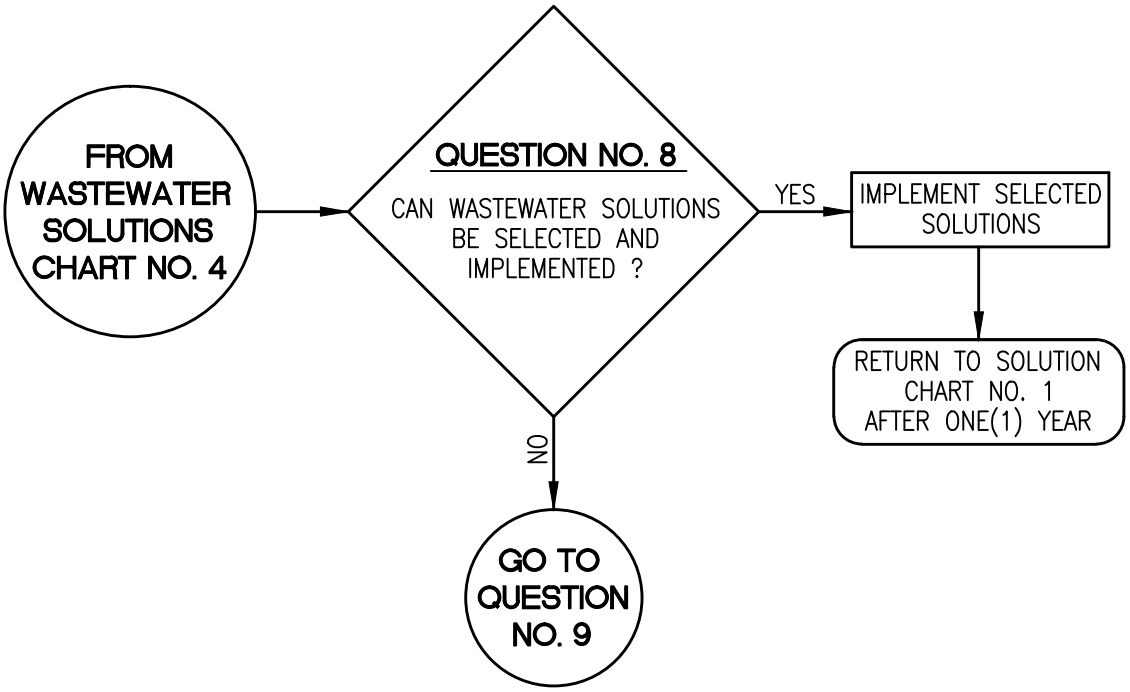
SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(5 AND 6) NUTRIENTS-SOLUTION CHART 2A.Dwg



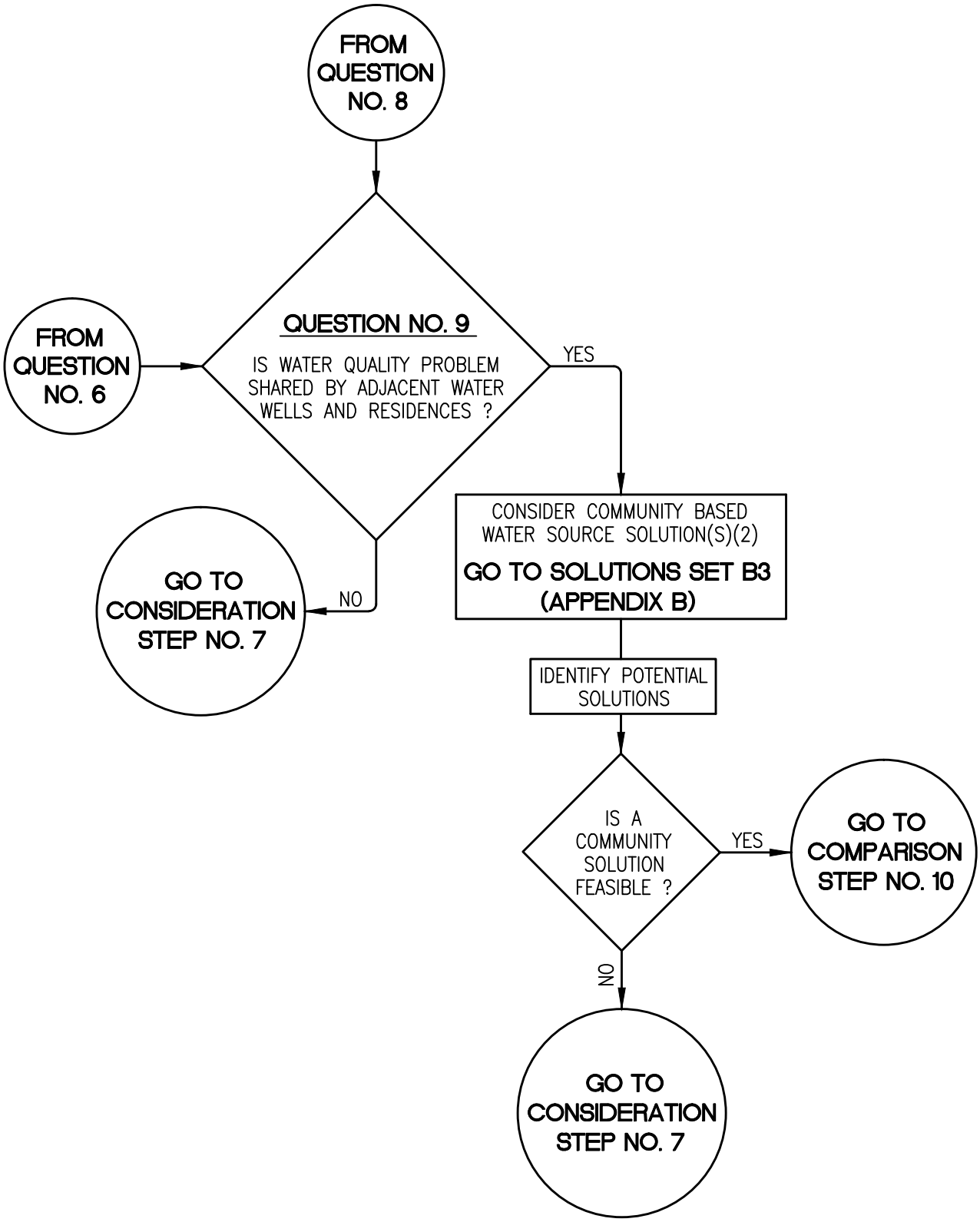
CONSIDERATION STEP NO. 7

SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



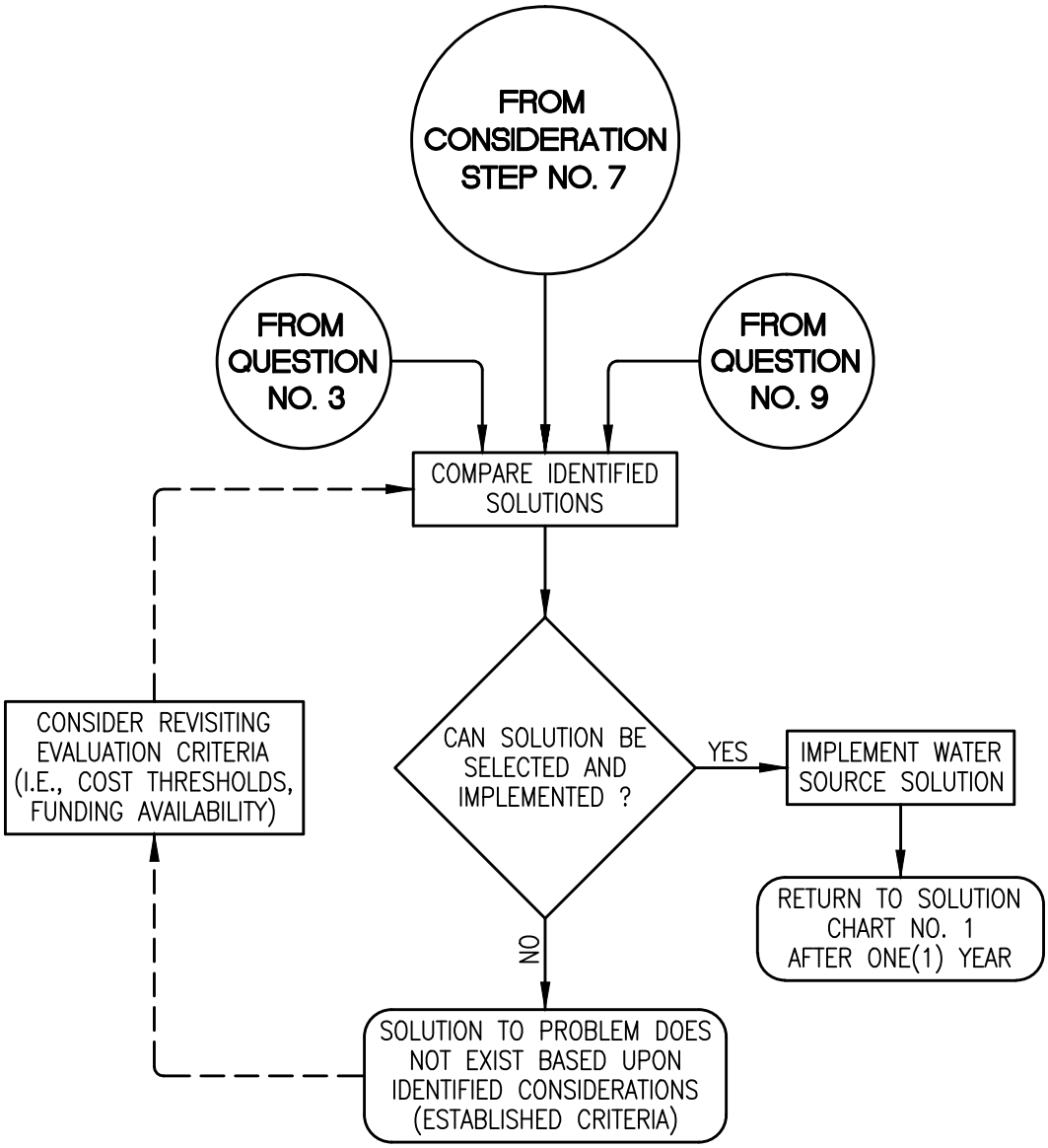
QUESTION NO. 8

SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



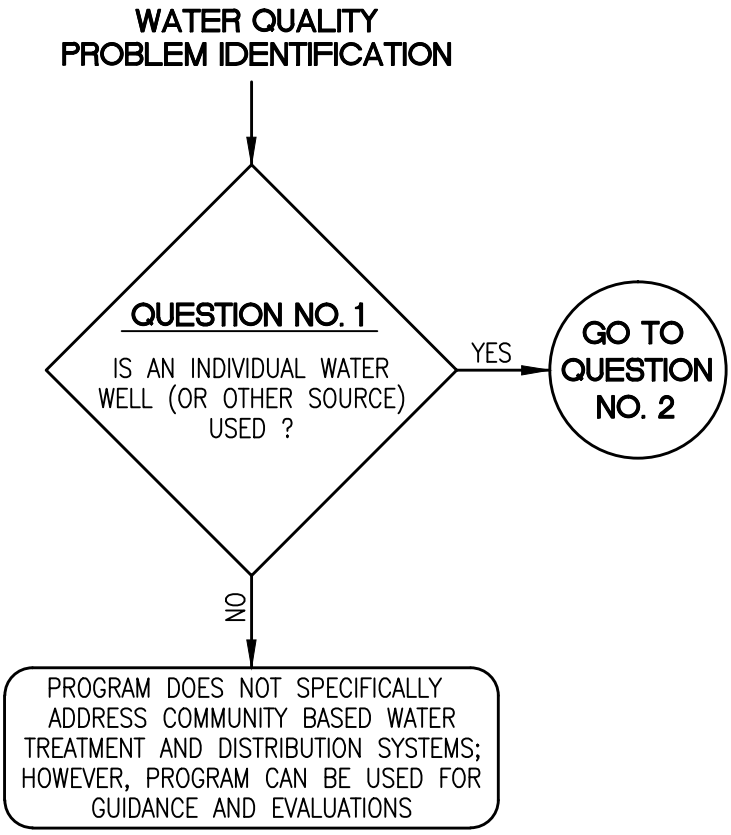
QUESTION NO. 9

SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



COMPARISON STEP NO. 10

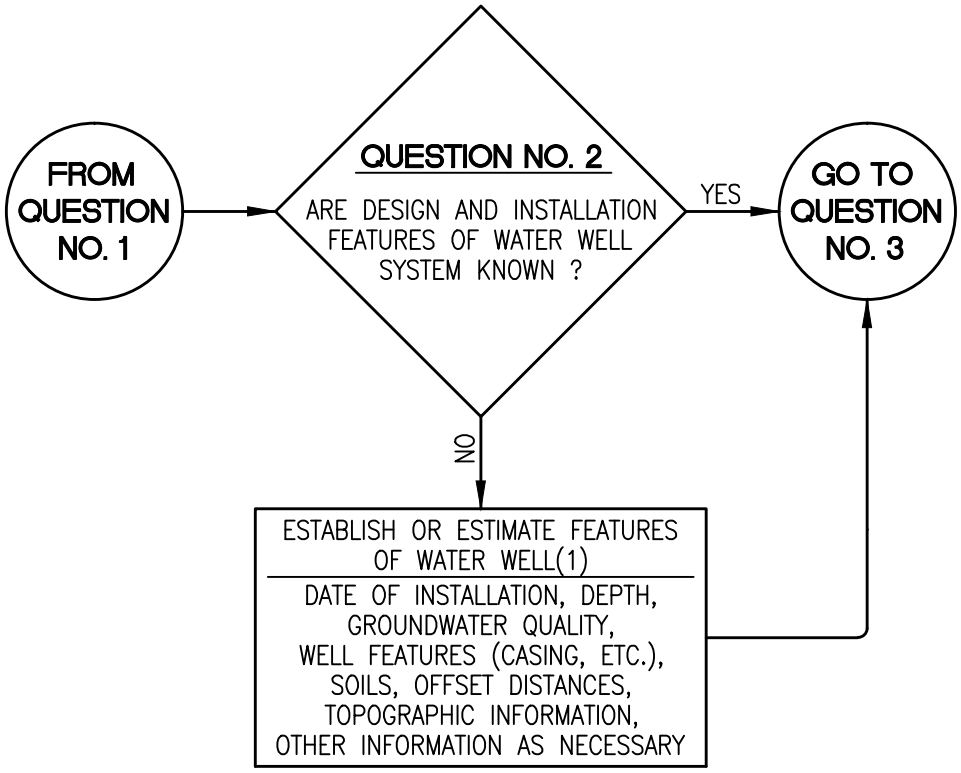
SOLUTION SERIES NO. 2A - WATER QUALITY SOLUTIONS - NUTRIENTS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 1

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(1) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg

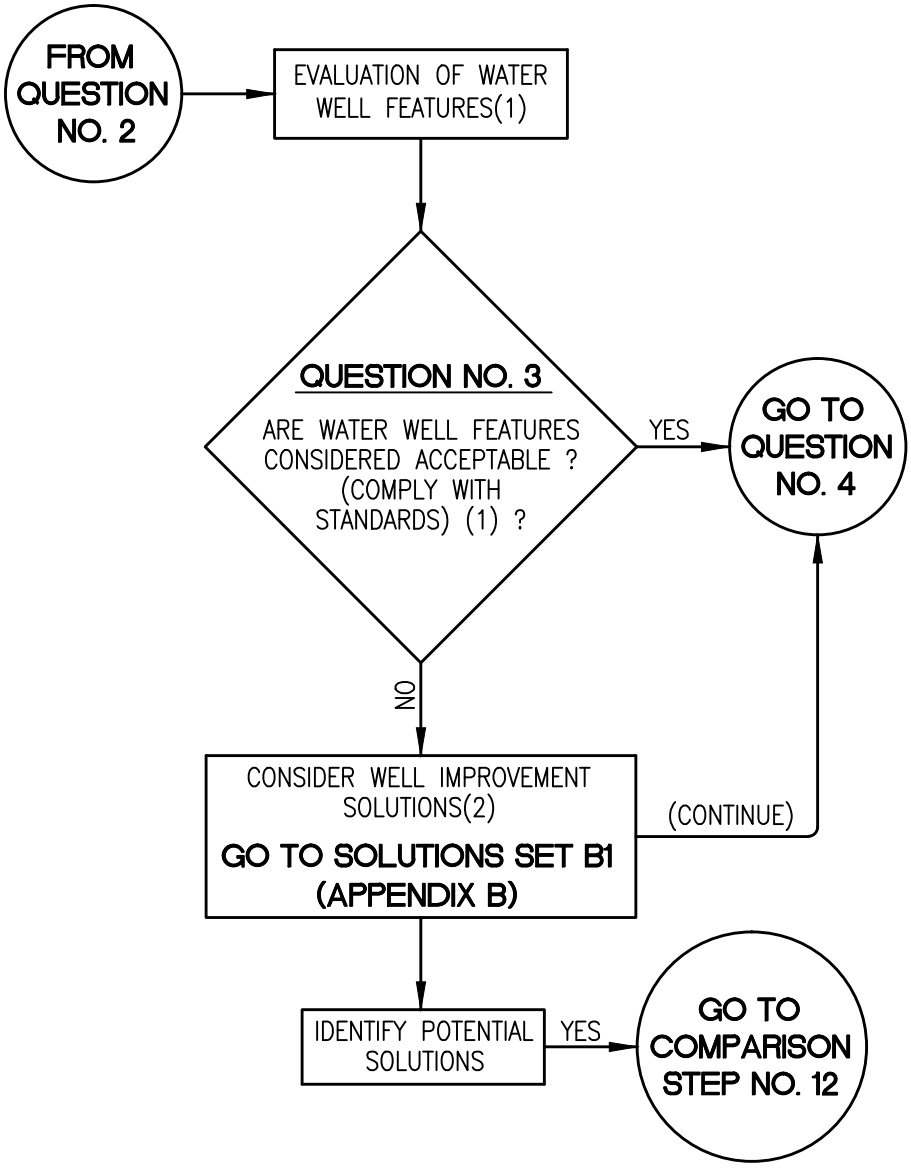


NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(2) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



NOTES:

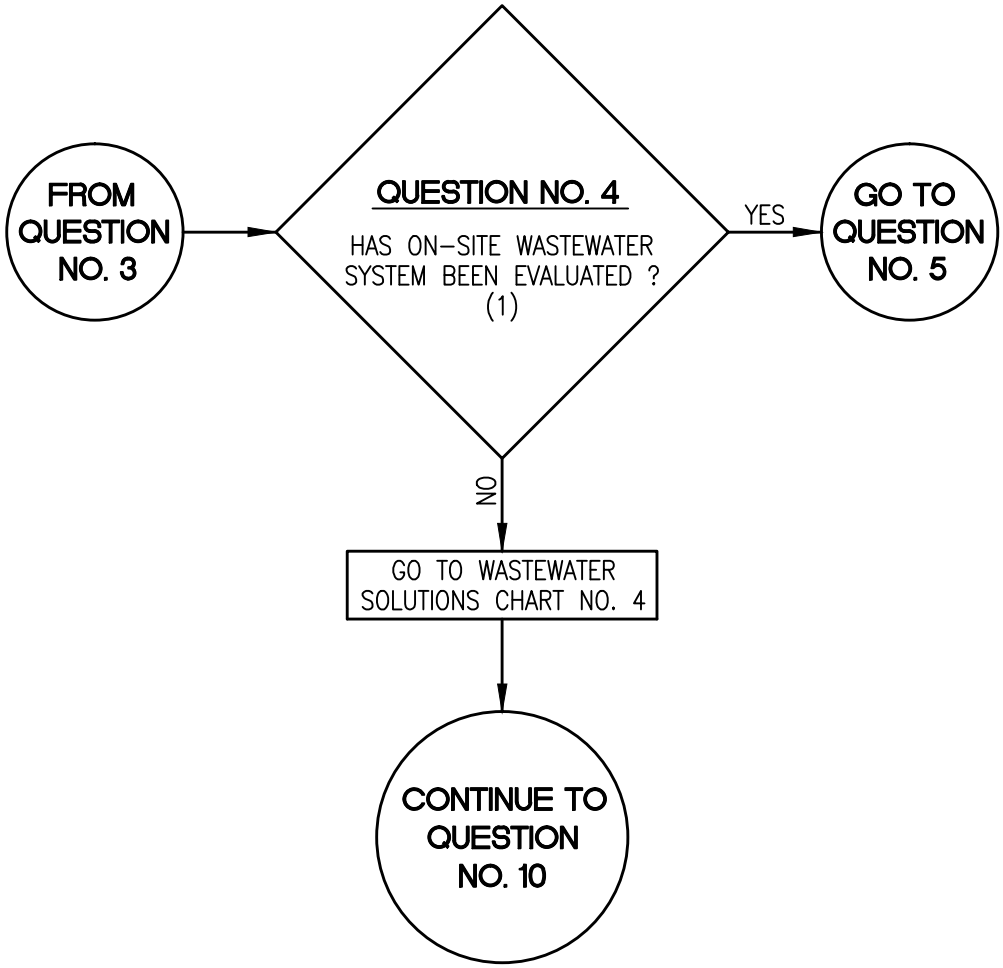
1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

QUESTION NO. 3

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(3) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg

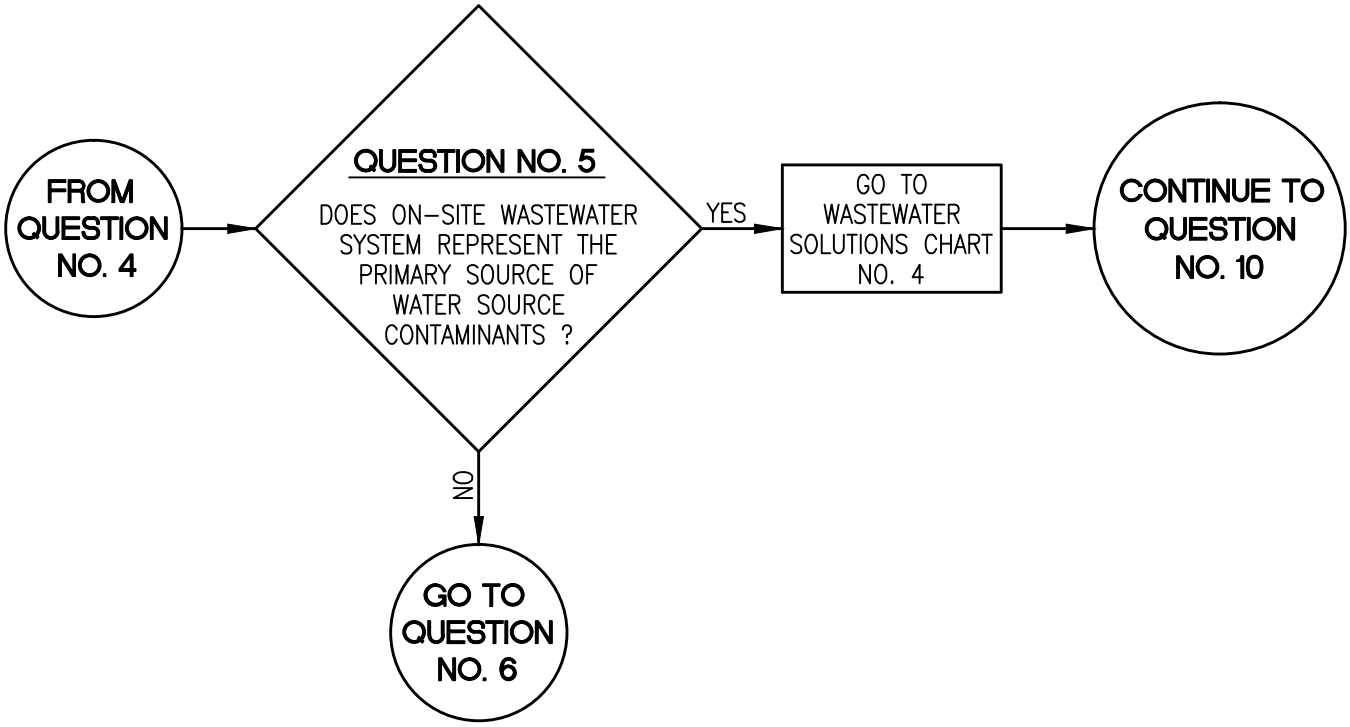


NOTE:
1. IF NO ON-SITE WASTEWATER SYSTEM EXISTS, GO TO QUESTION NO. 6.

QUESTION NO. 4

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

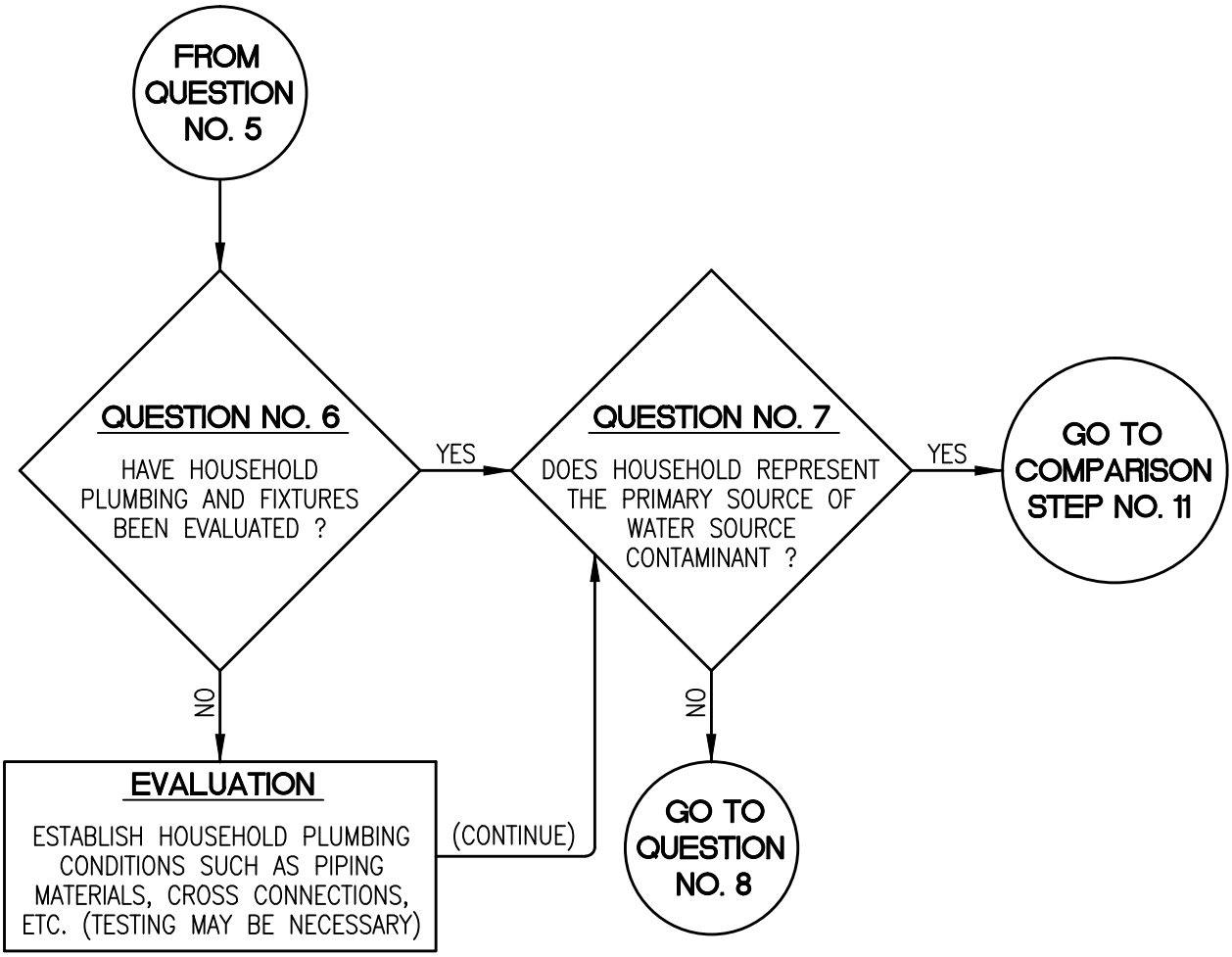
L:\TCDC\(4) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTION NO. 5

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

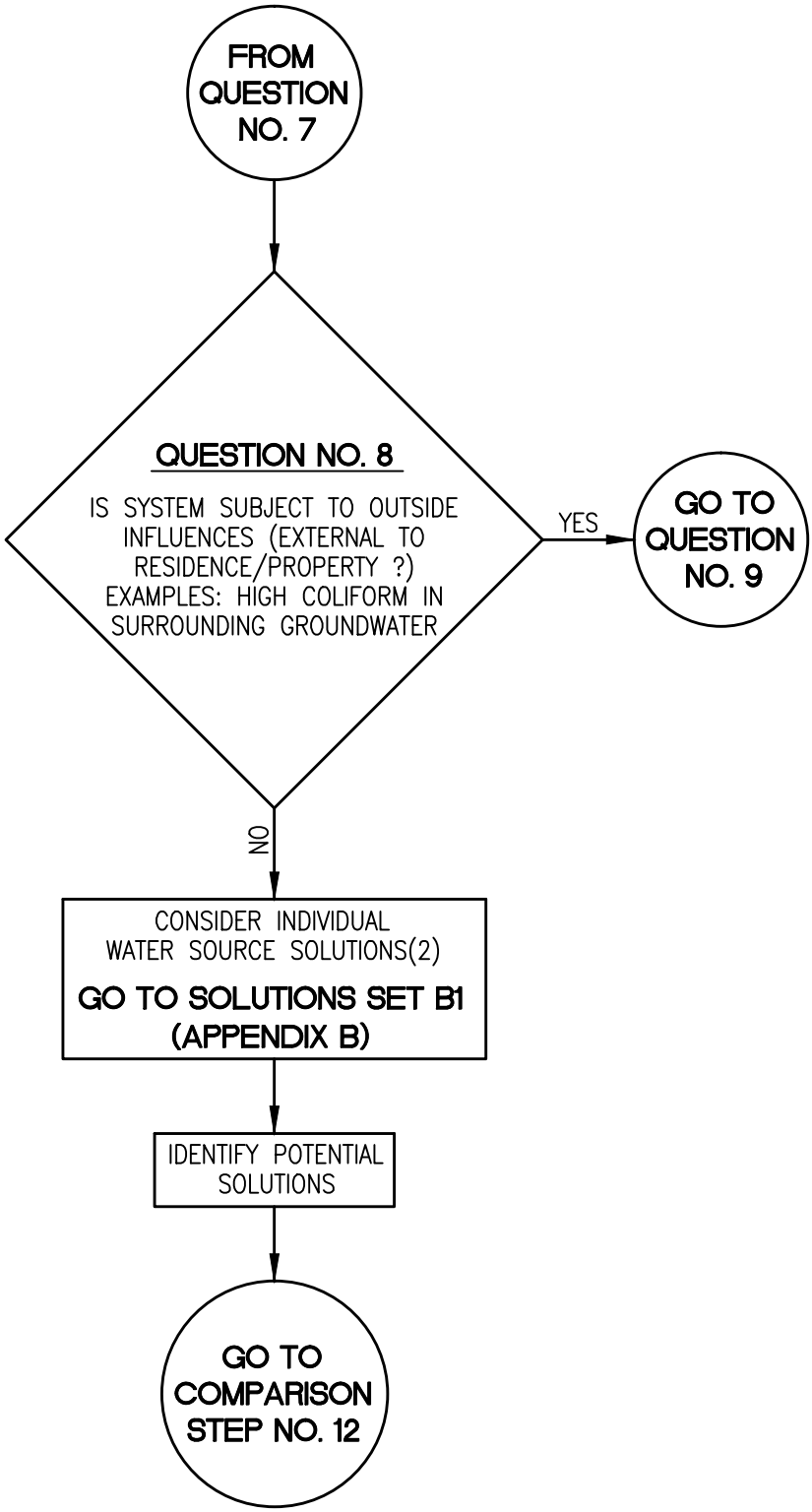
L:\TCDC\(5) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTIONS NO. 6 AND NO. 7

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

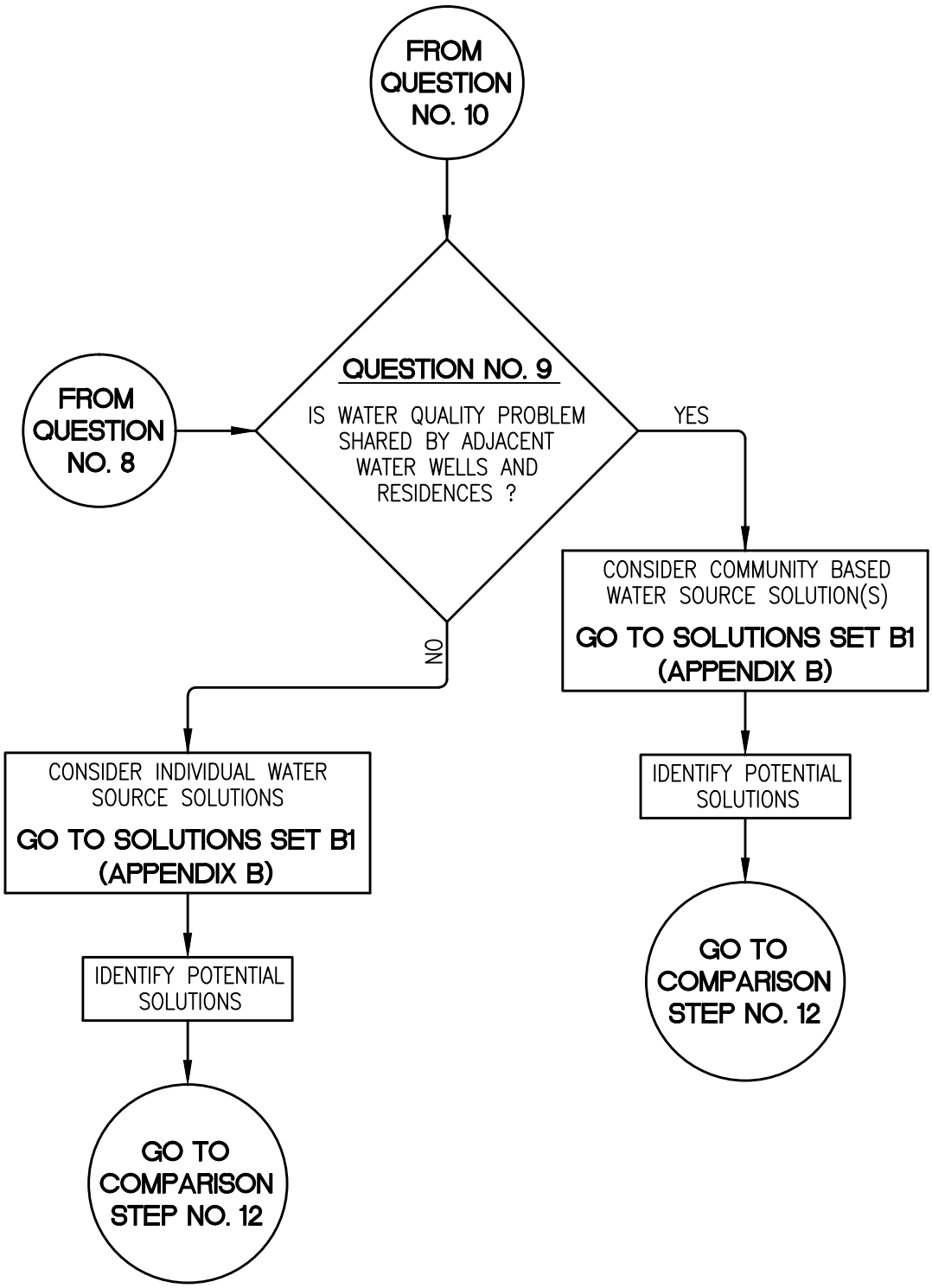
L:\TCDC\(6 AND 7) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTION NO. 8

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

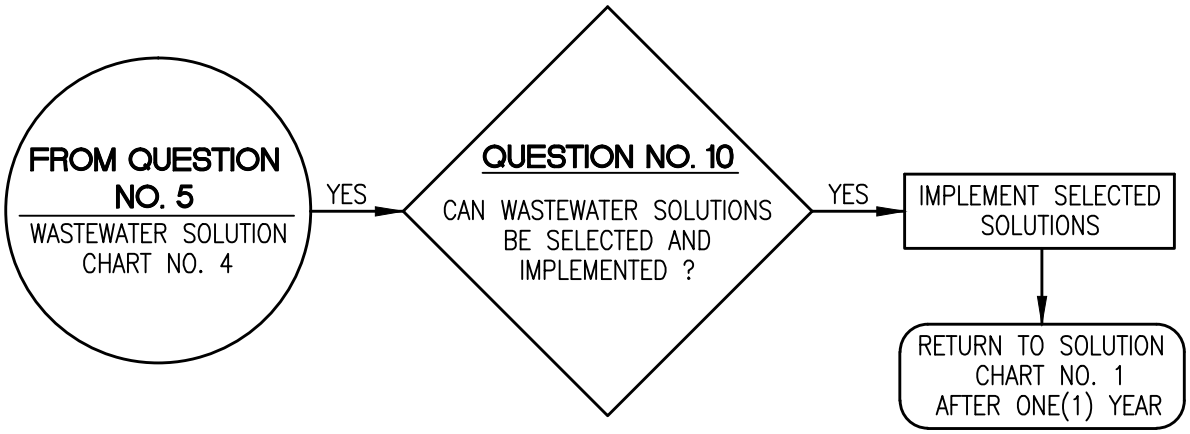
L:\TCDC\(8) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTION NO. 9

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

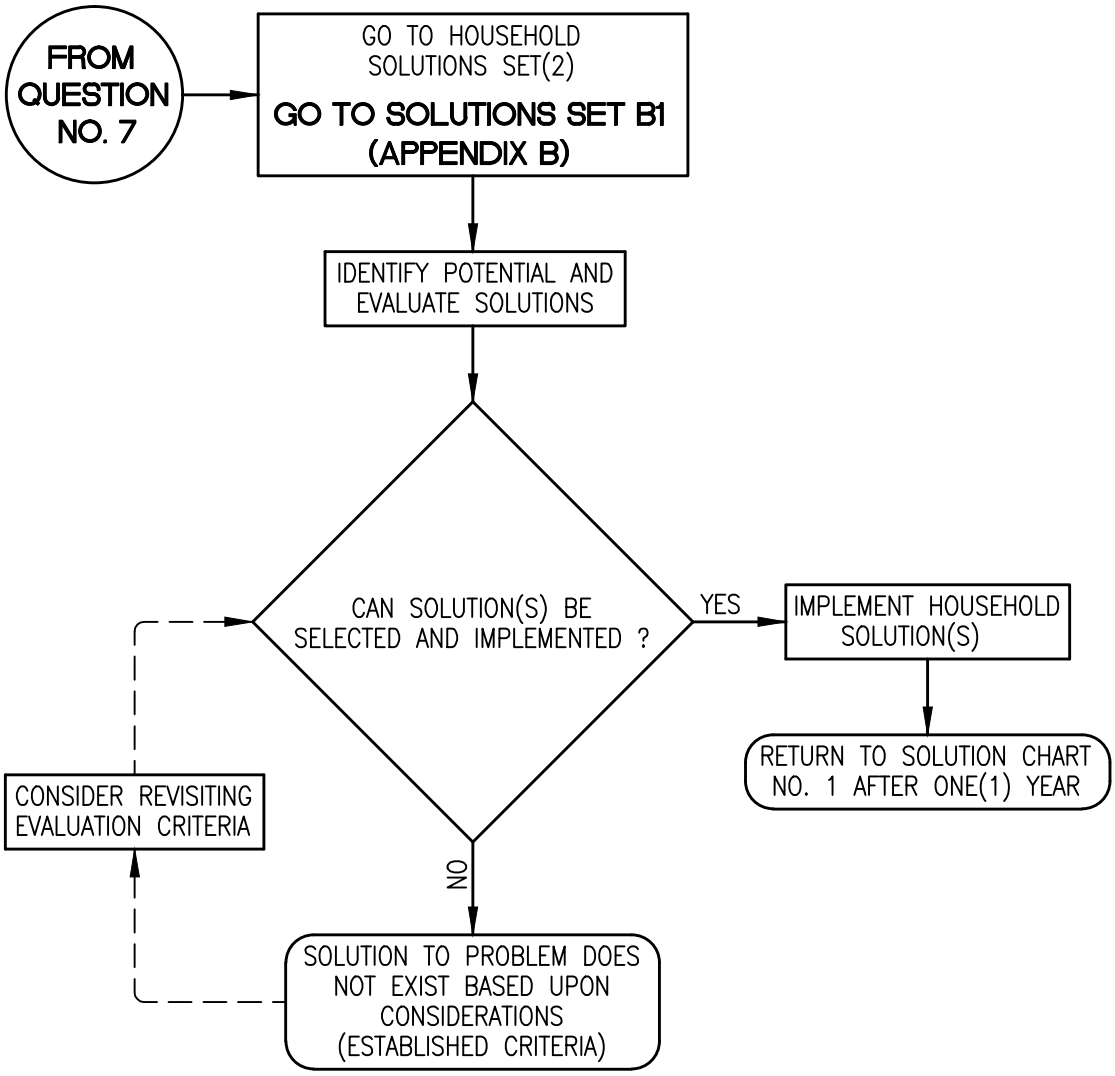
L:\TCDC\(9) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTION NO. 10

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

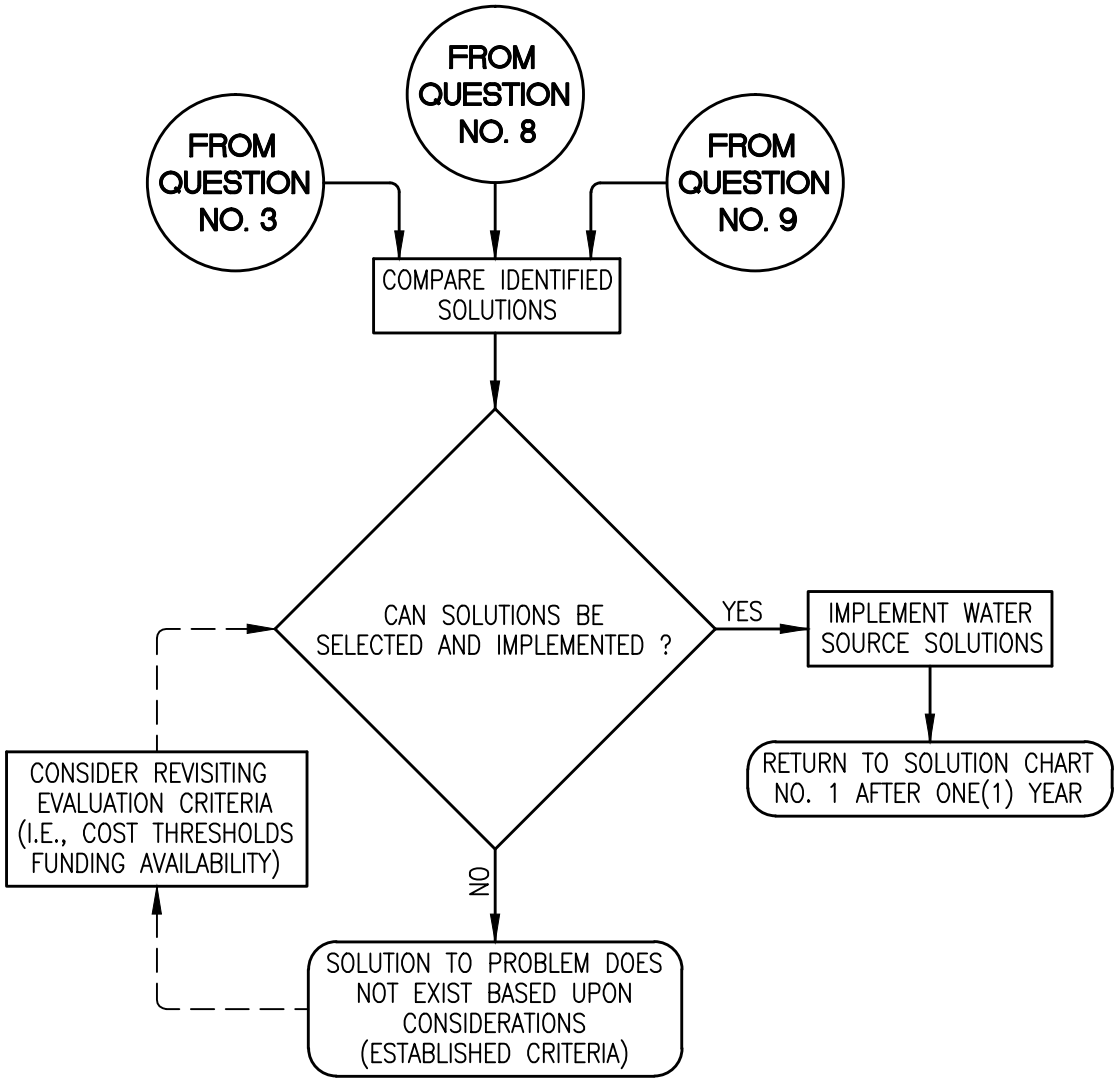
L:\TCDC\(10) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



COMPARISON STEP NO. 11

SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

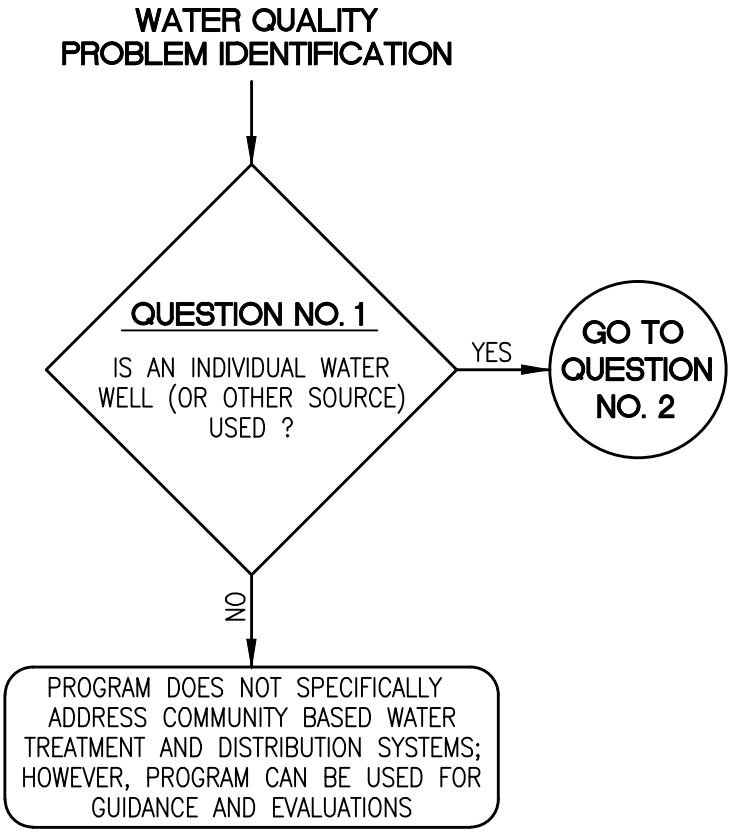
L:\TCDC\(11) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



COMPARISON STEP NO. 12

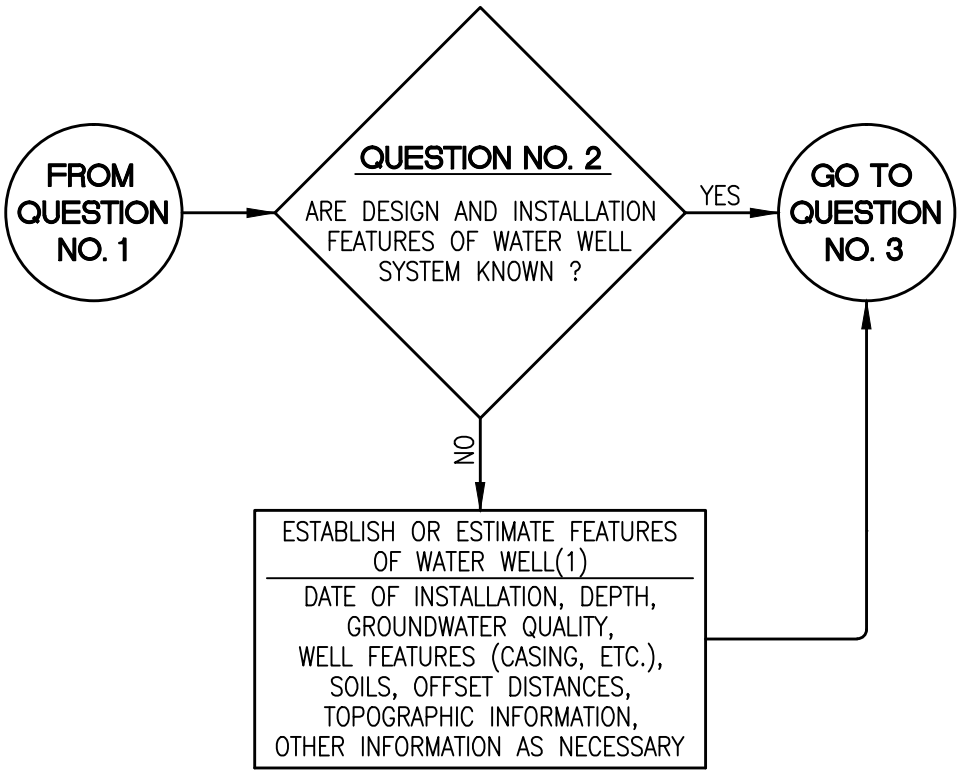
SOLUTION CHART NO. 2B - WATER QUALITY SOLUTIONS - BACTERIOLOGICAL
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(12) BACTERIOLOGICAL-SOLUTION CHART 2B.Dwg



QUESTION NO. 1

SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

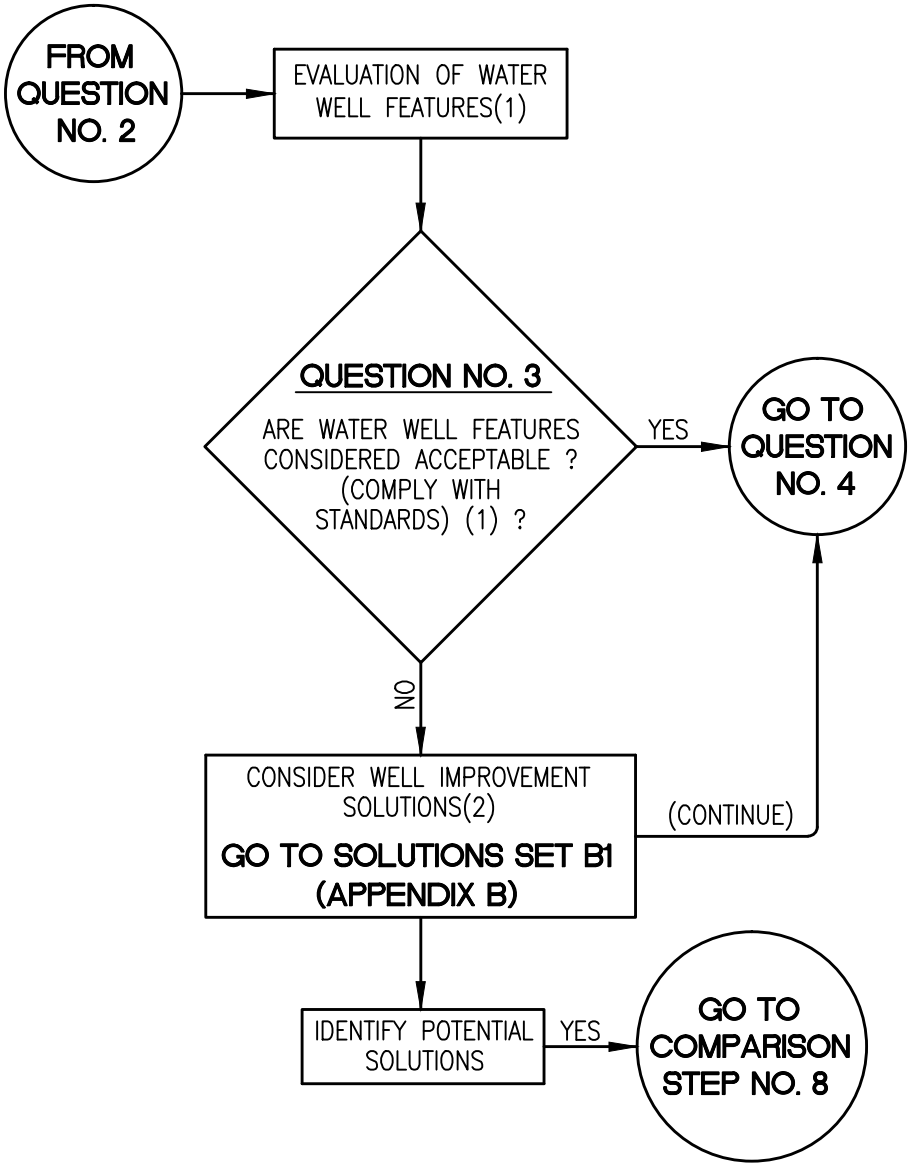


NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(2) INORGANICS-SOLUTION CHART 2C.Dwg



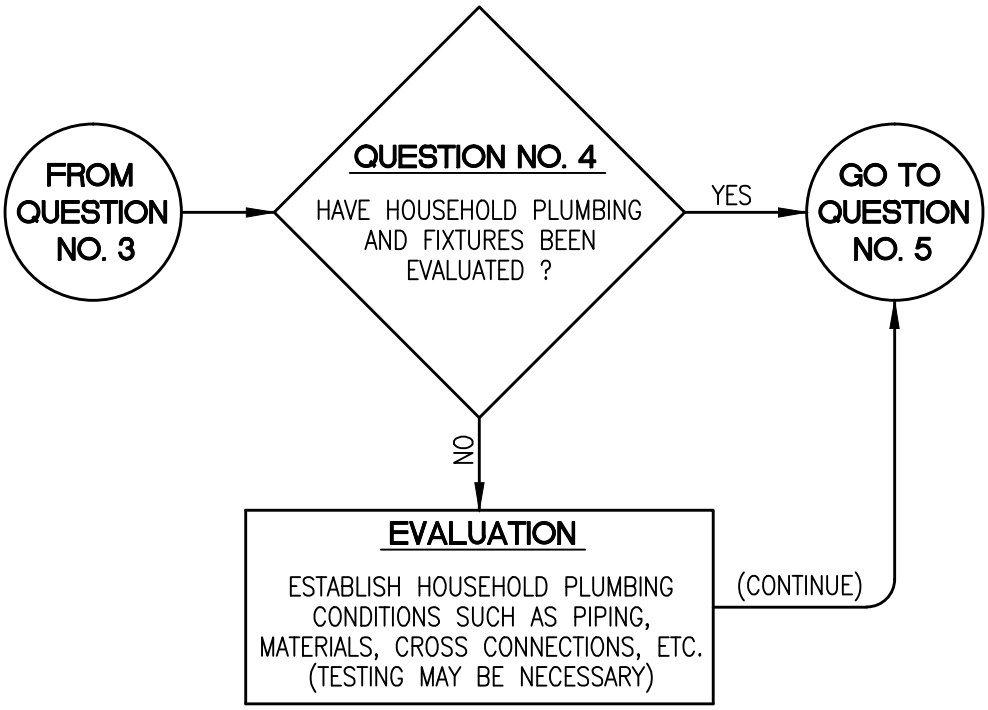
NOTES:

1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

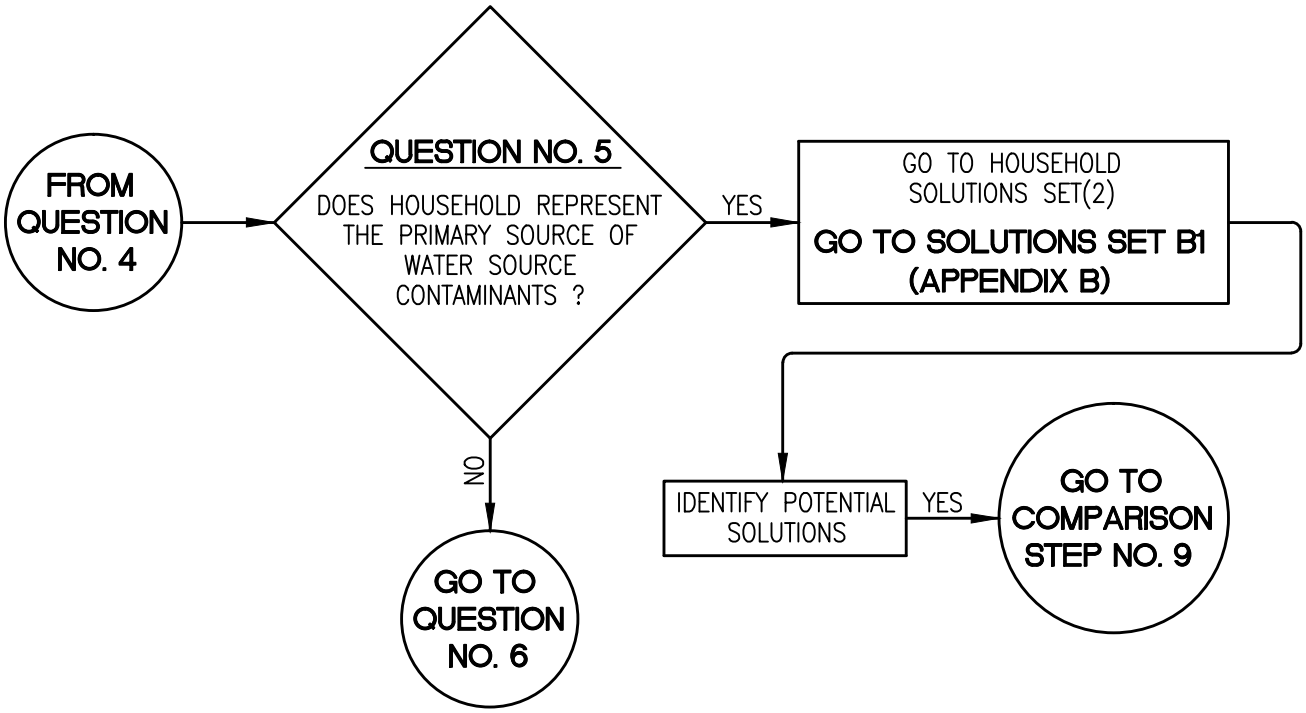
QUESTION NO. 3

SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 4

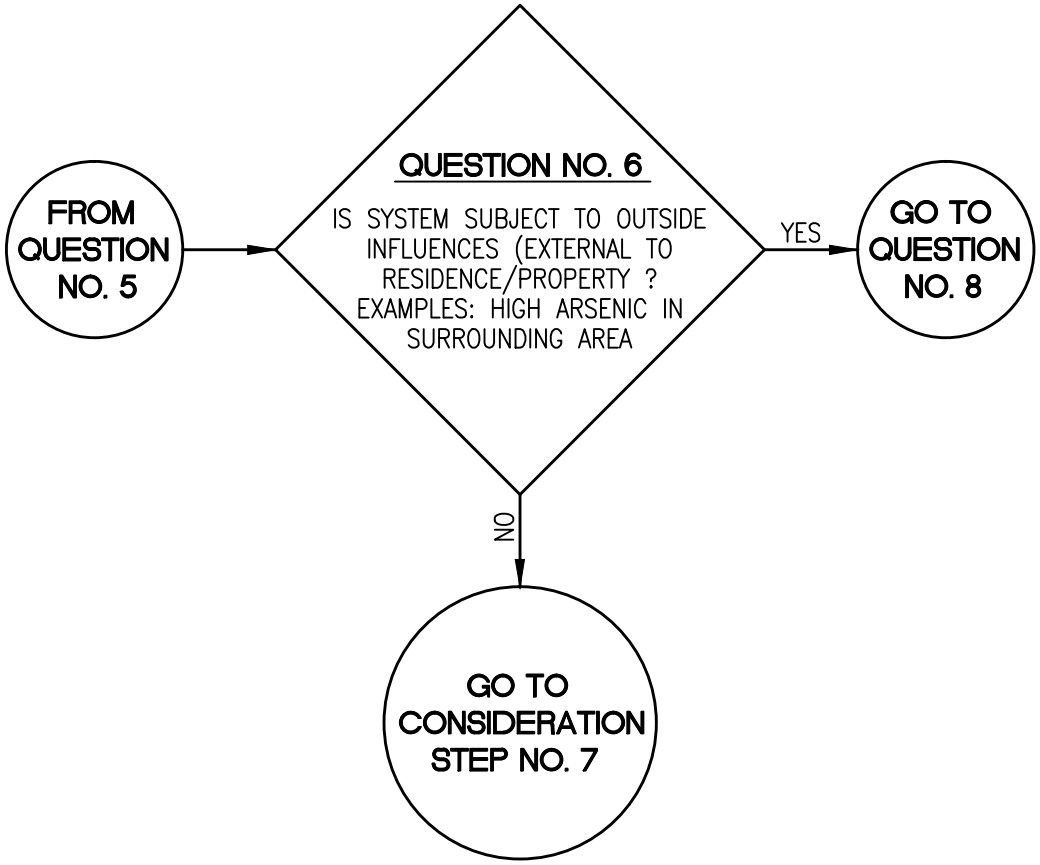
SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 5

SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

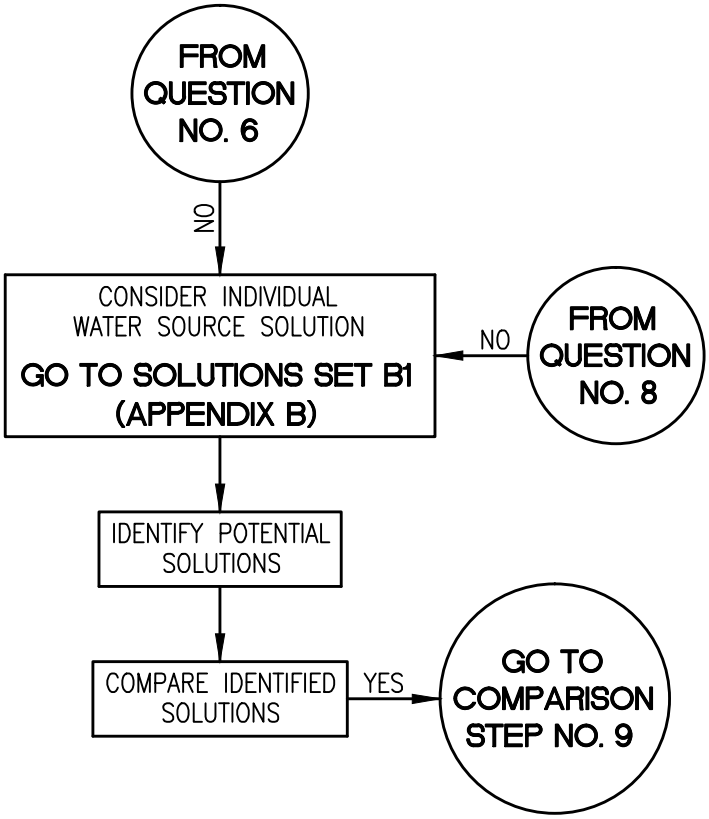
L:\TCDC\(5) INORGANICS-SOLUTION CHART 2C.Dwg



QUESTION NO. 6

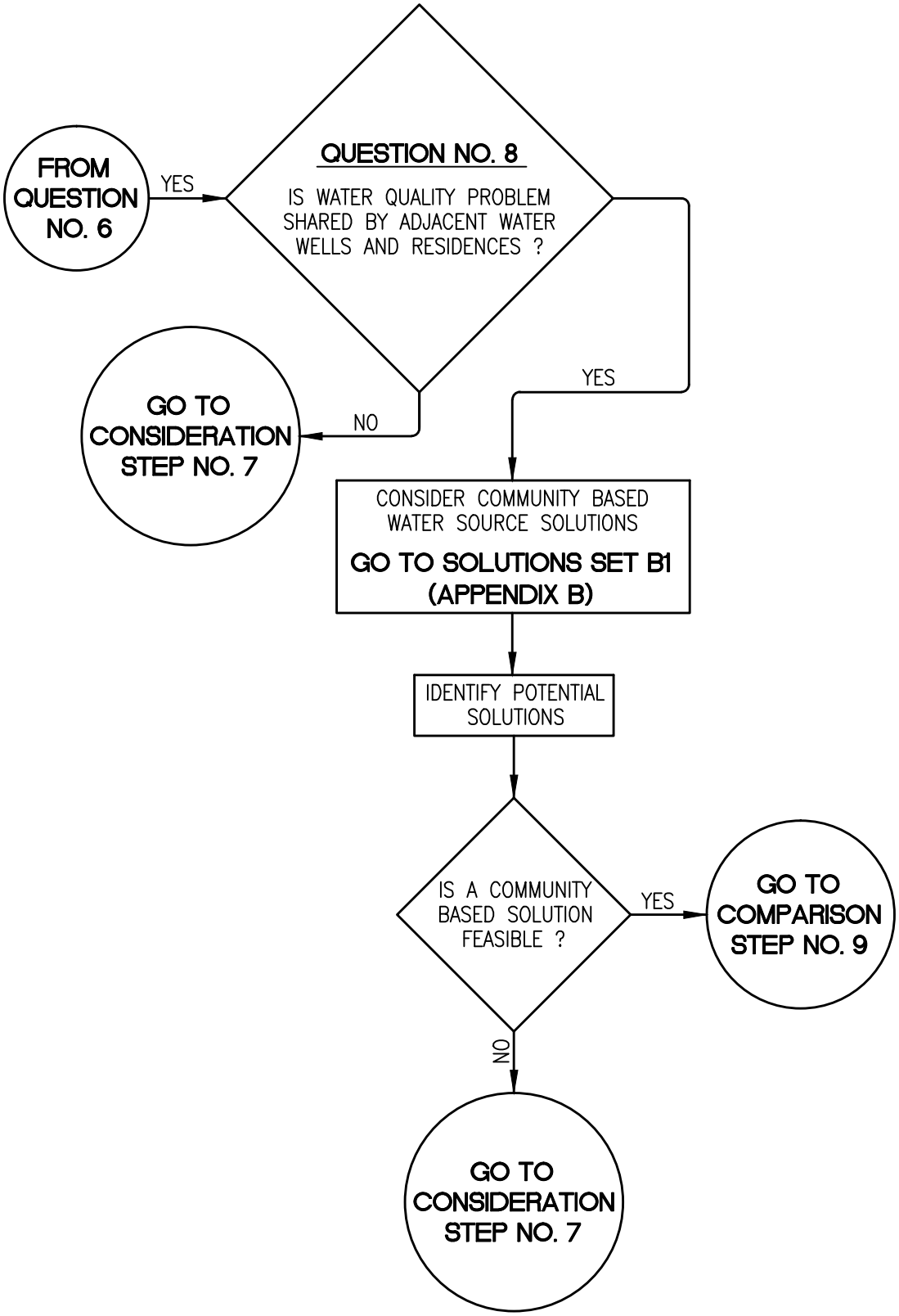
SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(6) INORGANICS-SOLUTION CHART 2C.Dwg



CONSIDERATION STEP NO. 7

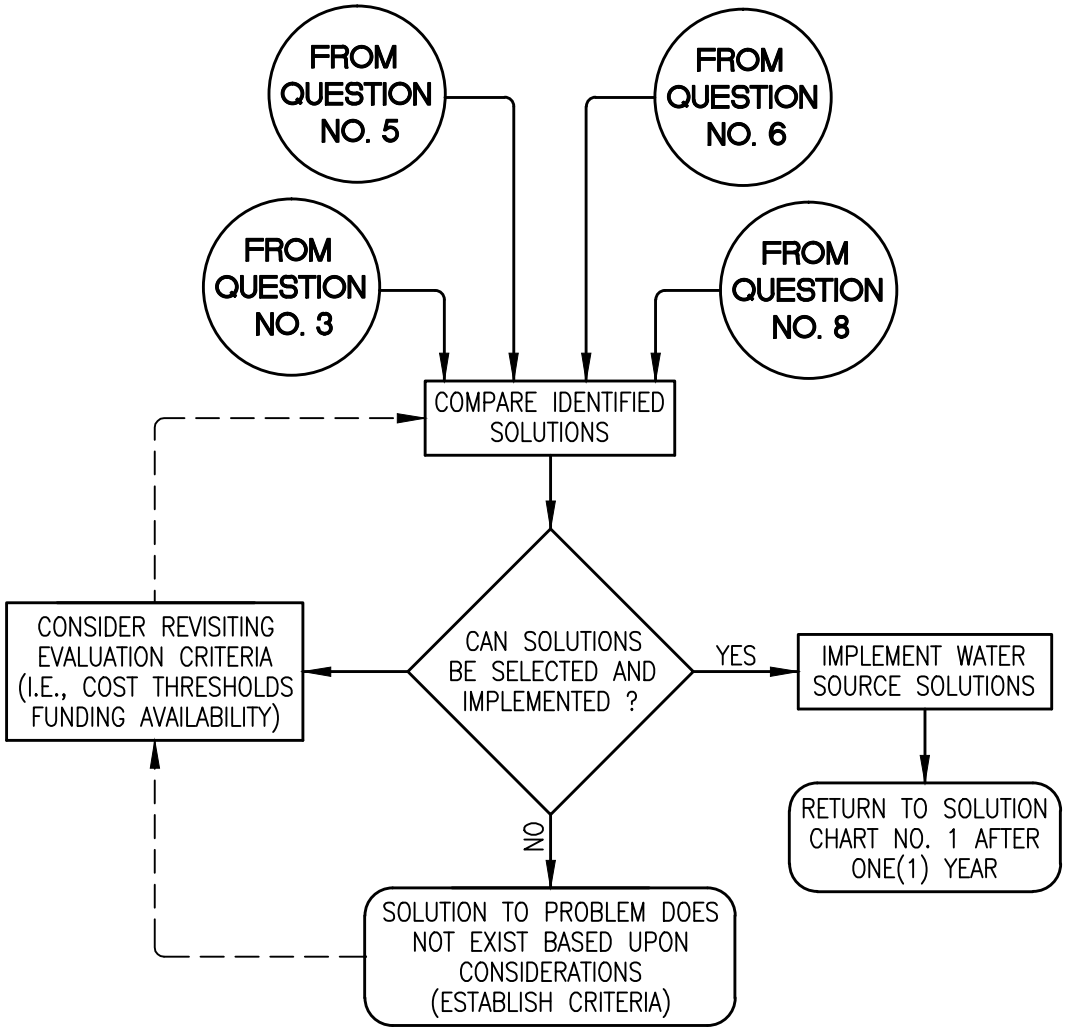
SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 8

SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

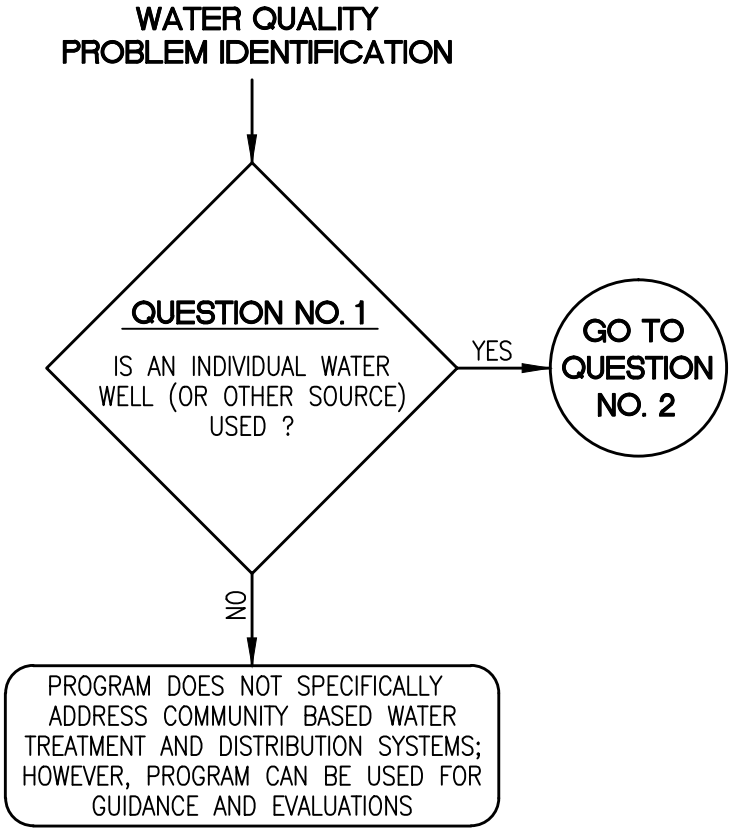
L:\TCDC\(8) INORGANICS-SOLUTION CHART 2C.Dwg



COMPARISON STEP NO. 9

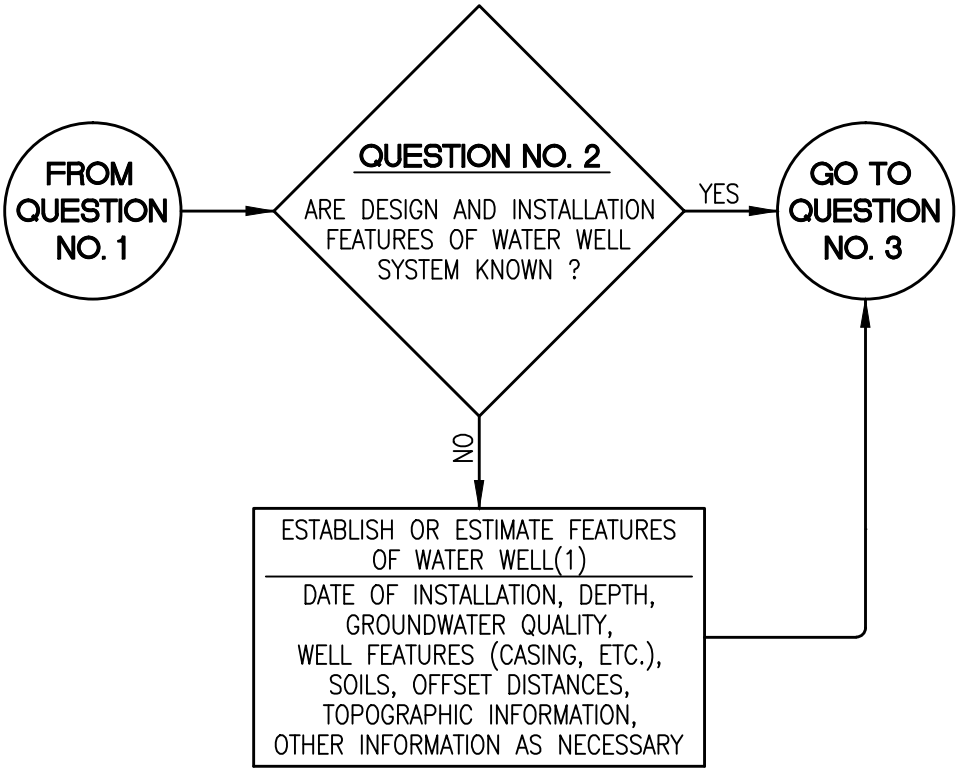
SOLUTION SERIES NO. 2C - WATER QUALITY SOLUTIONS - INORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(9) INORGANICS-SOLUTION CHART 2C.Dwg



QUESTION NO. 1

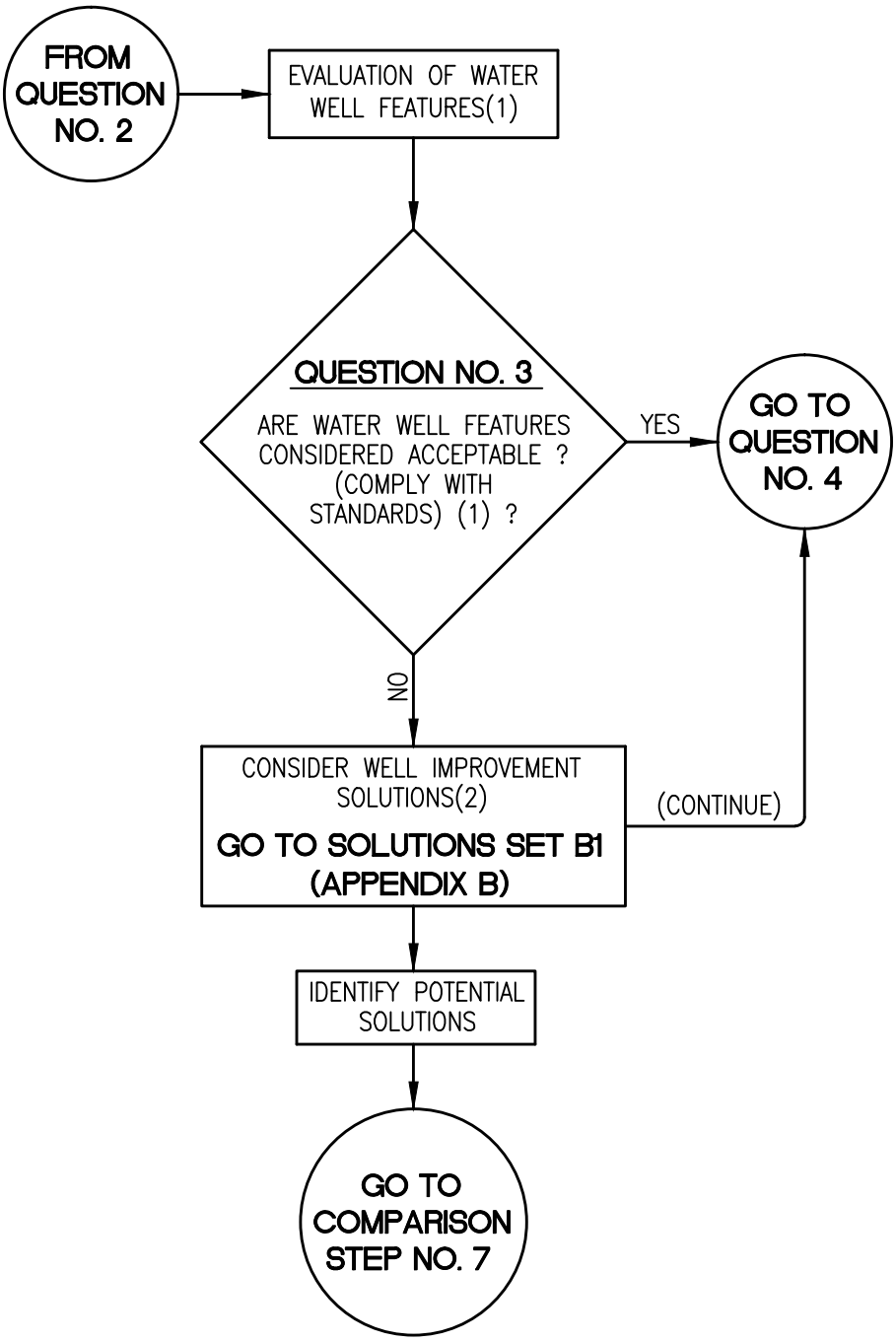
SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



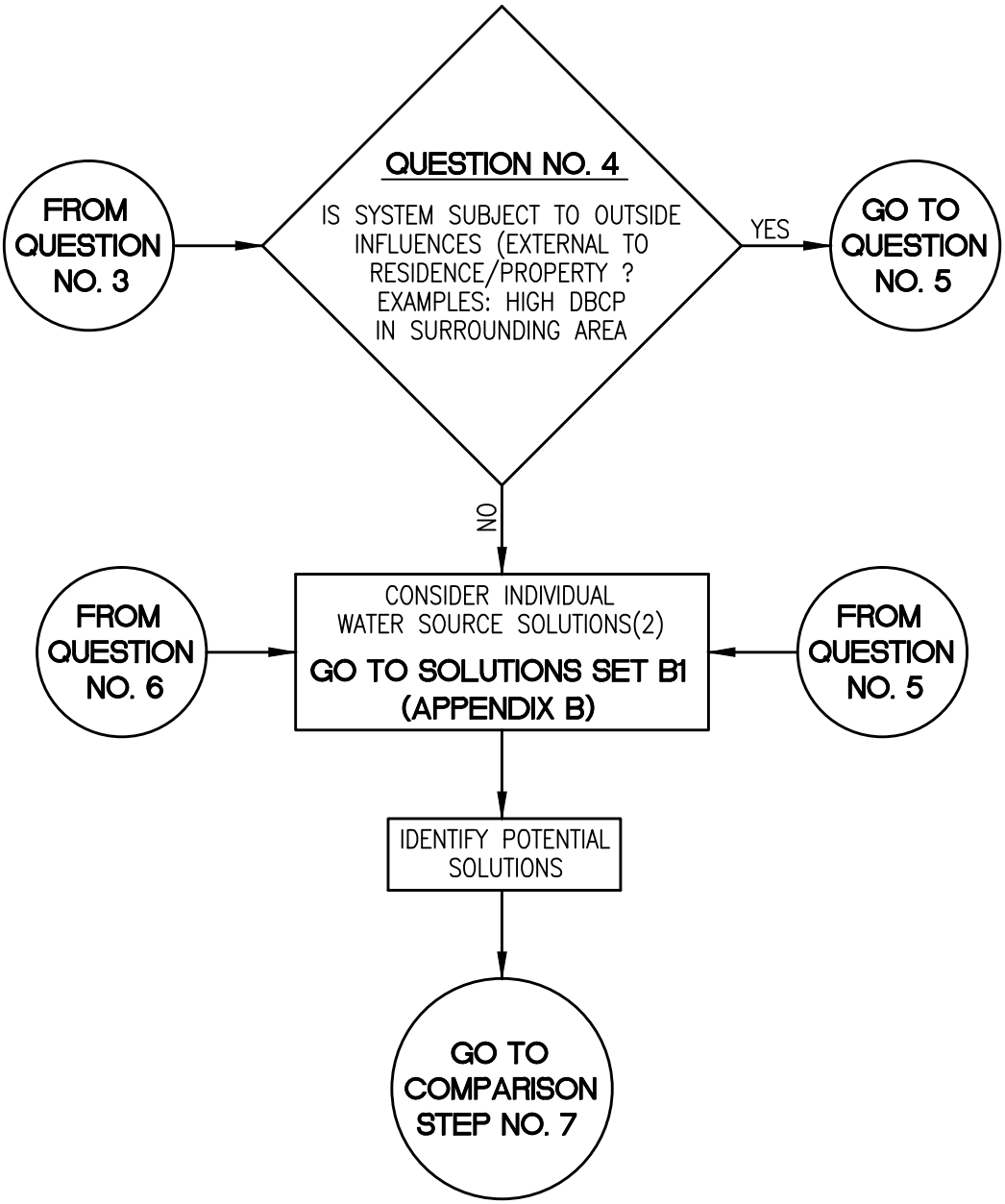
NOTES:

1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

QUESTION NO. 3

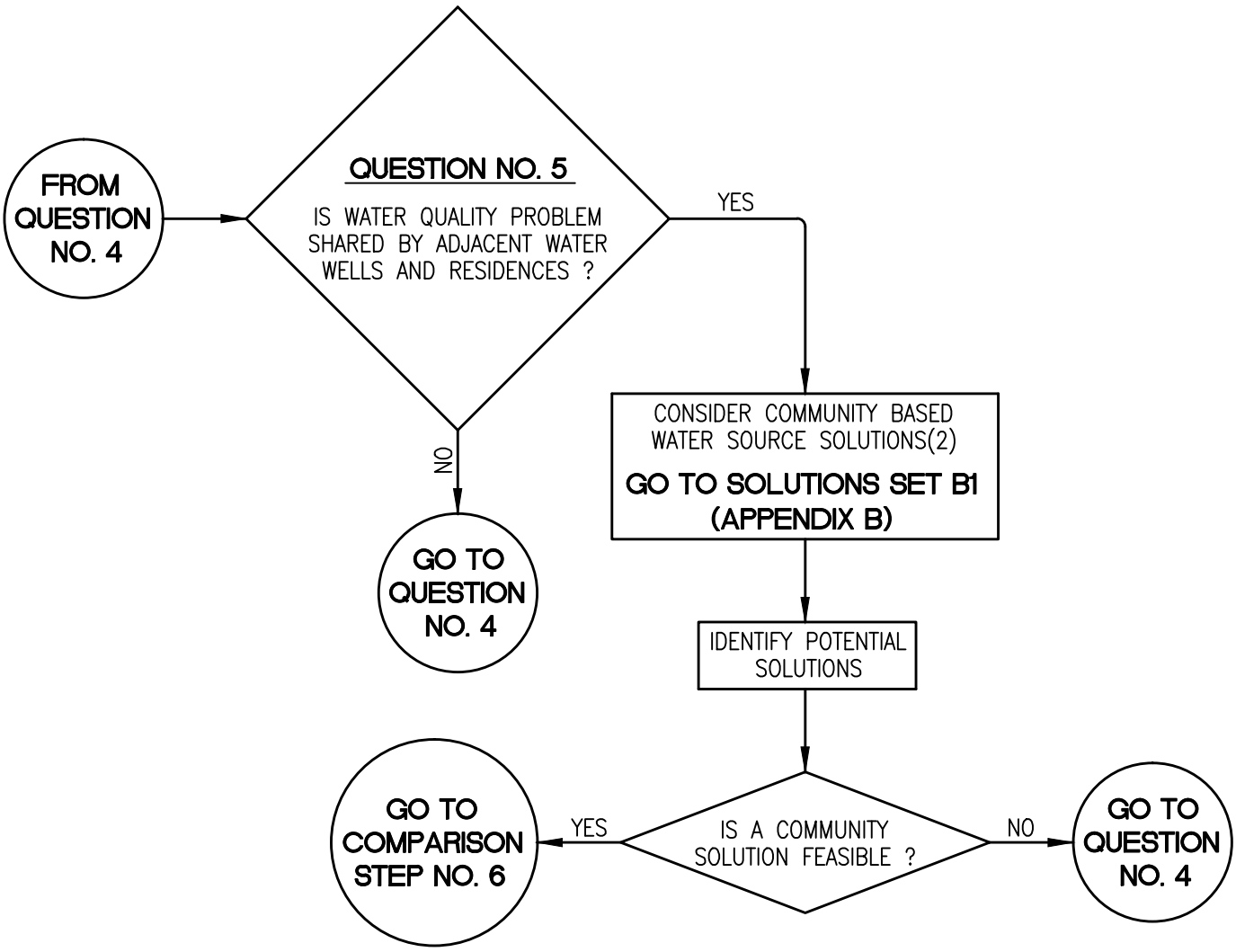
SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 4

SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

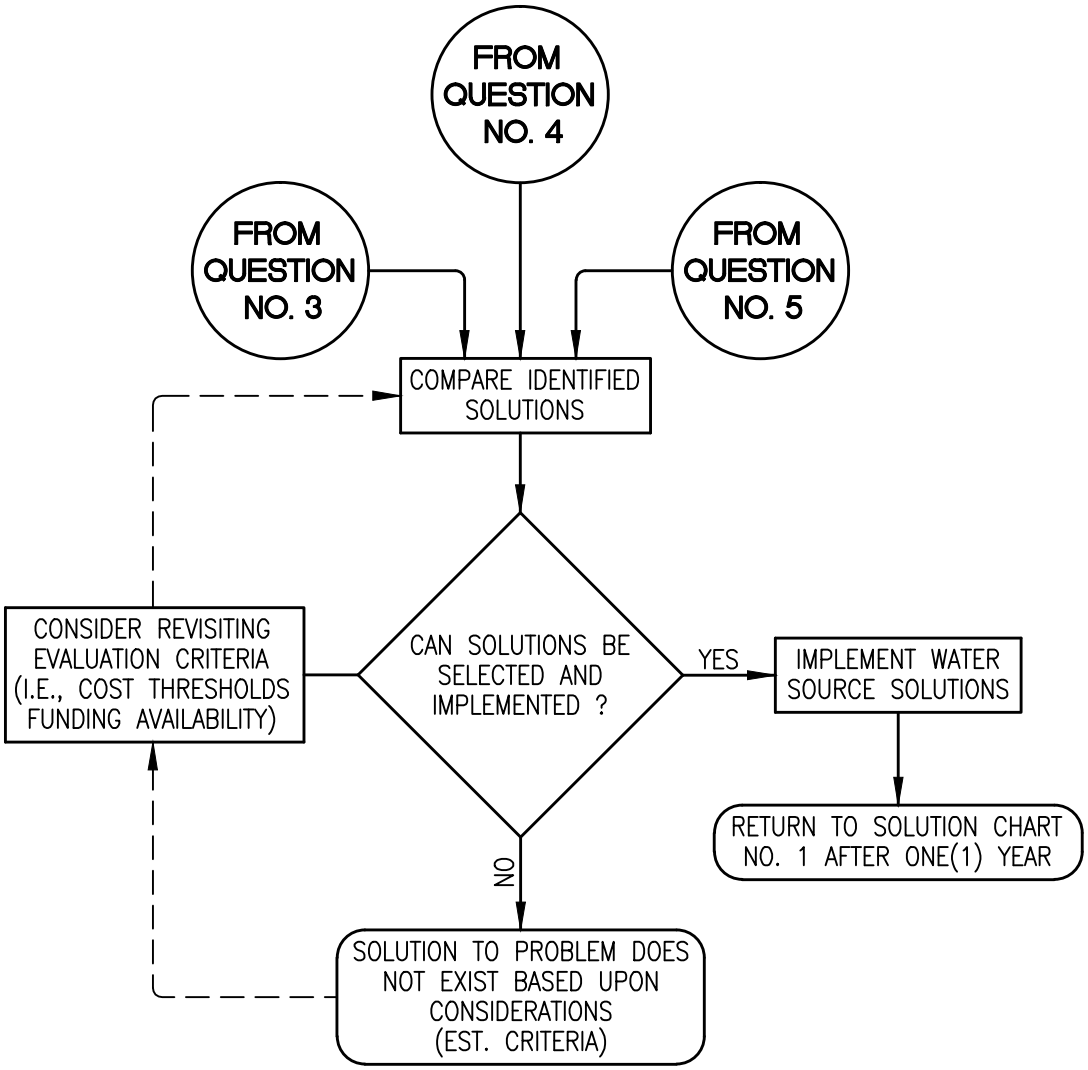
L:\TCDC\(4) ORGANICS-CHART 2D.Dwg



QUESTION NO. 5

SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

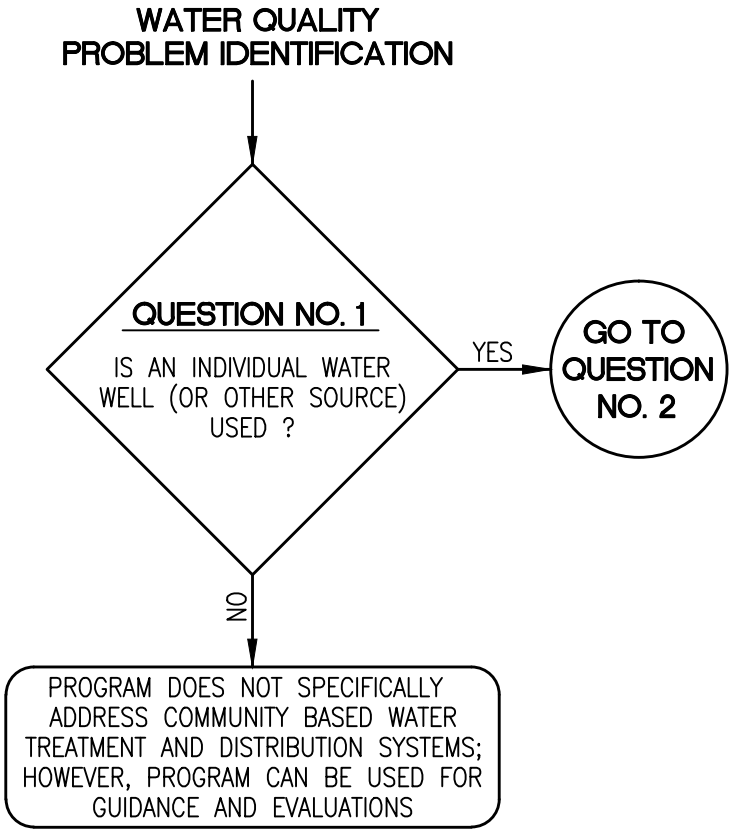
L:\TCDC\(5) ORGANICS-CHART 2D.Dwg



COMPARISON STEP NO. 6

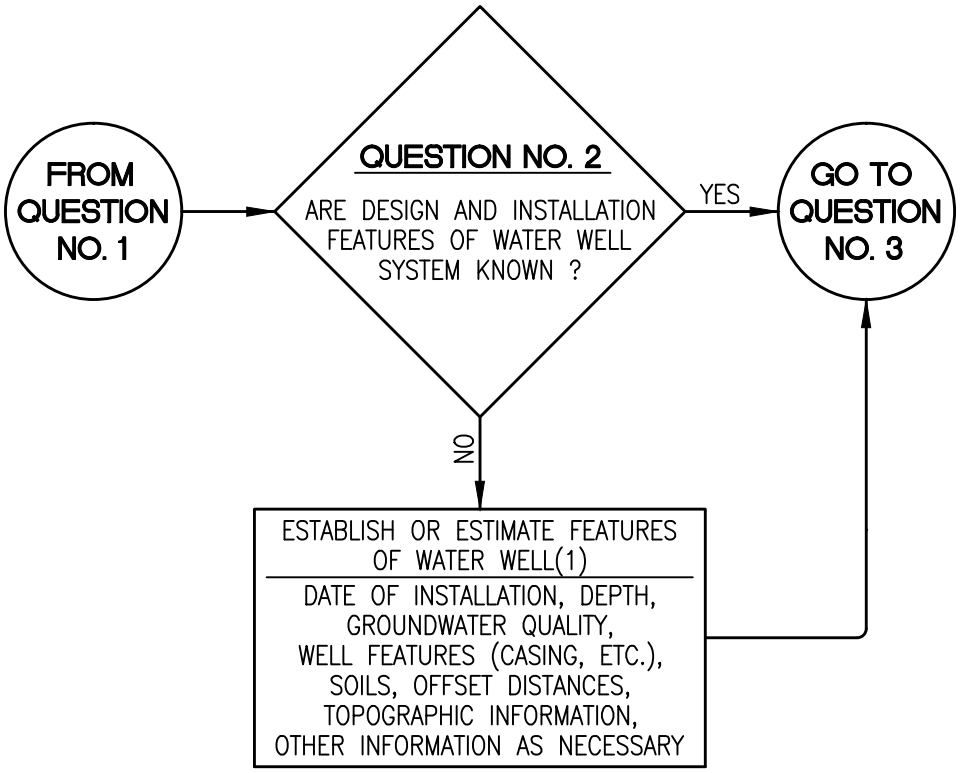
SOLUTION CHART NO. 2D - WATER QUALITY SOLUTIONS - ORGANICS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(6) ORGANICS-CHART 2D.Dwg



QUESTION NO. 1

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

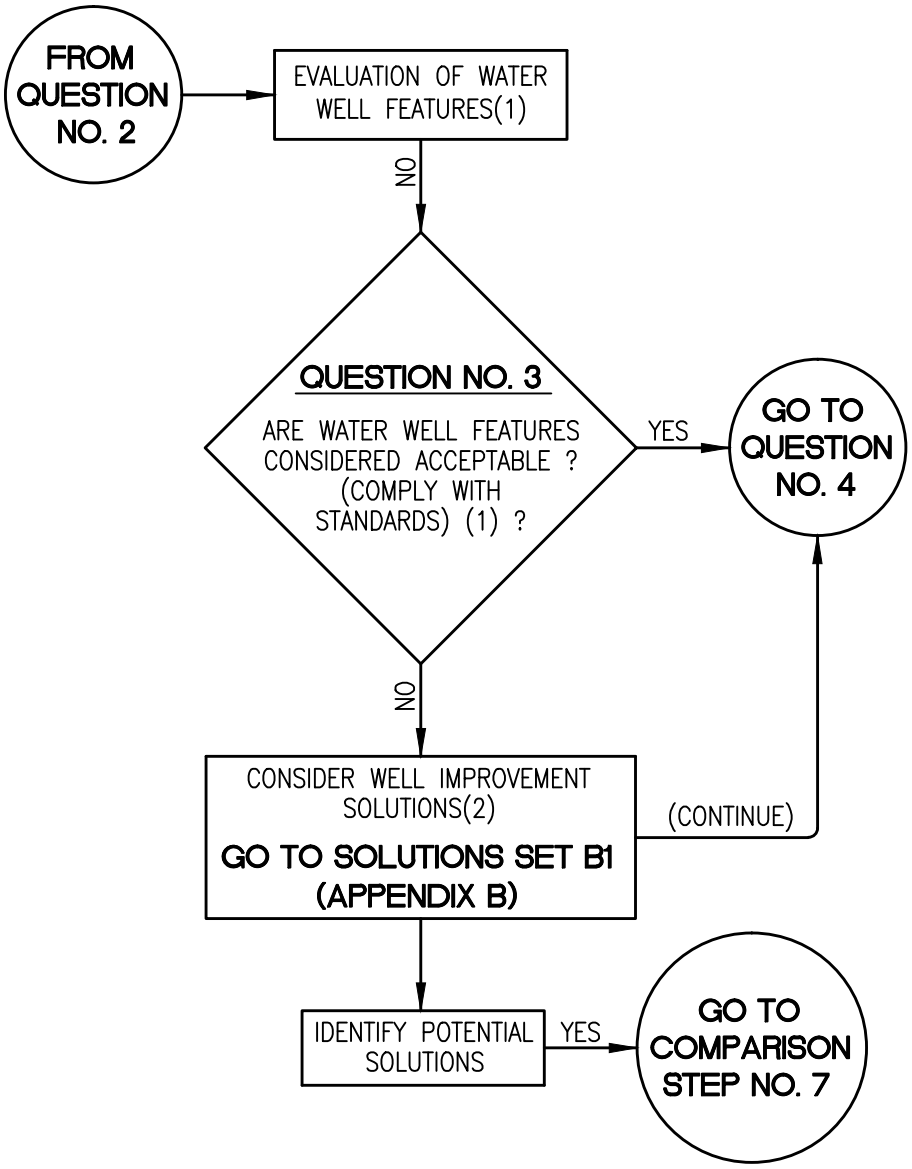


NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(2) GENERAL WATER QUALITY- CHART 2E.Dwg



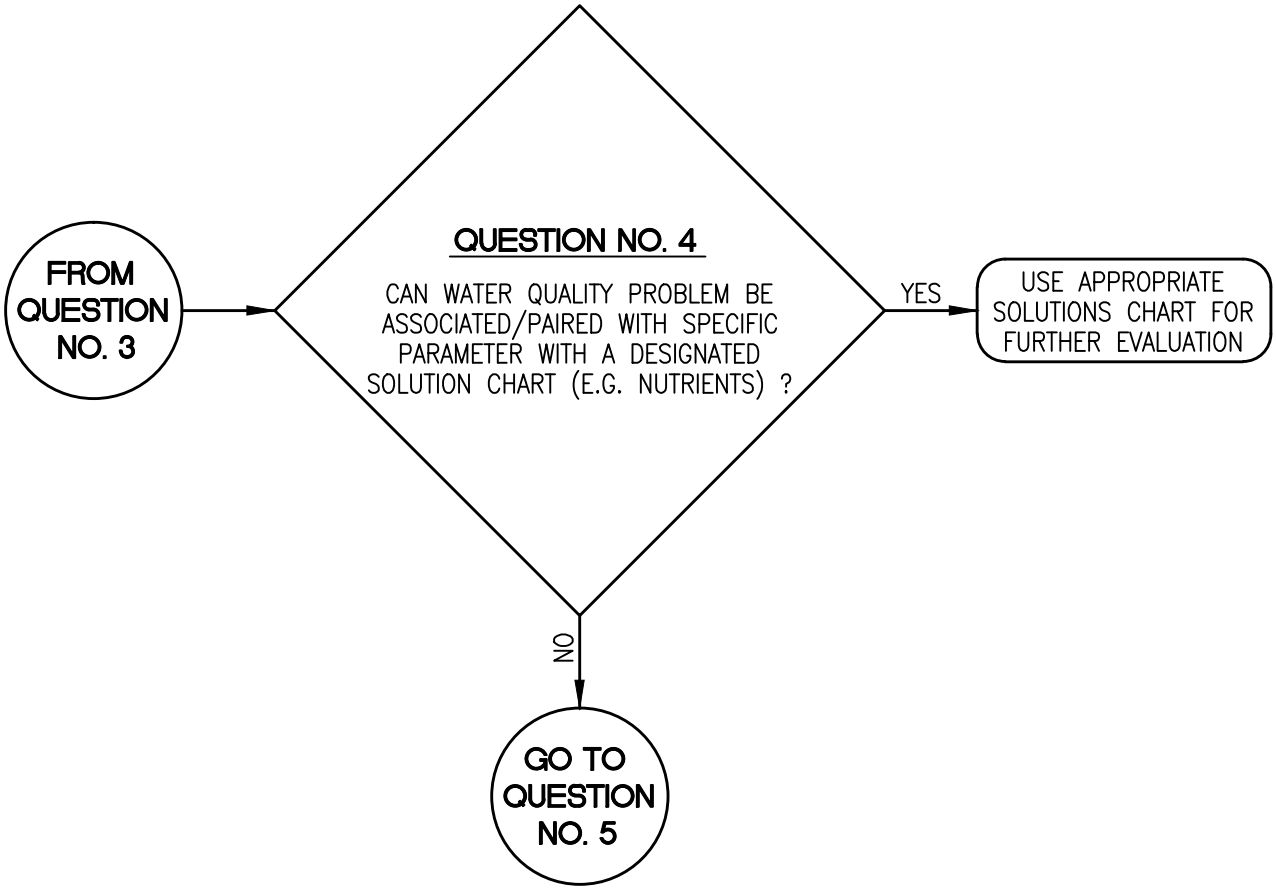
NOTES:

1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

QUESTION NO. 3

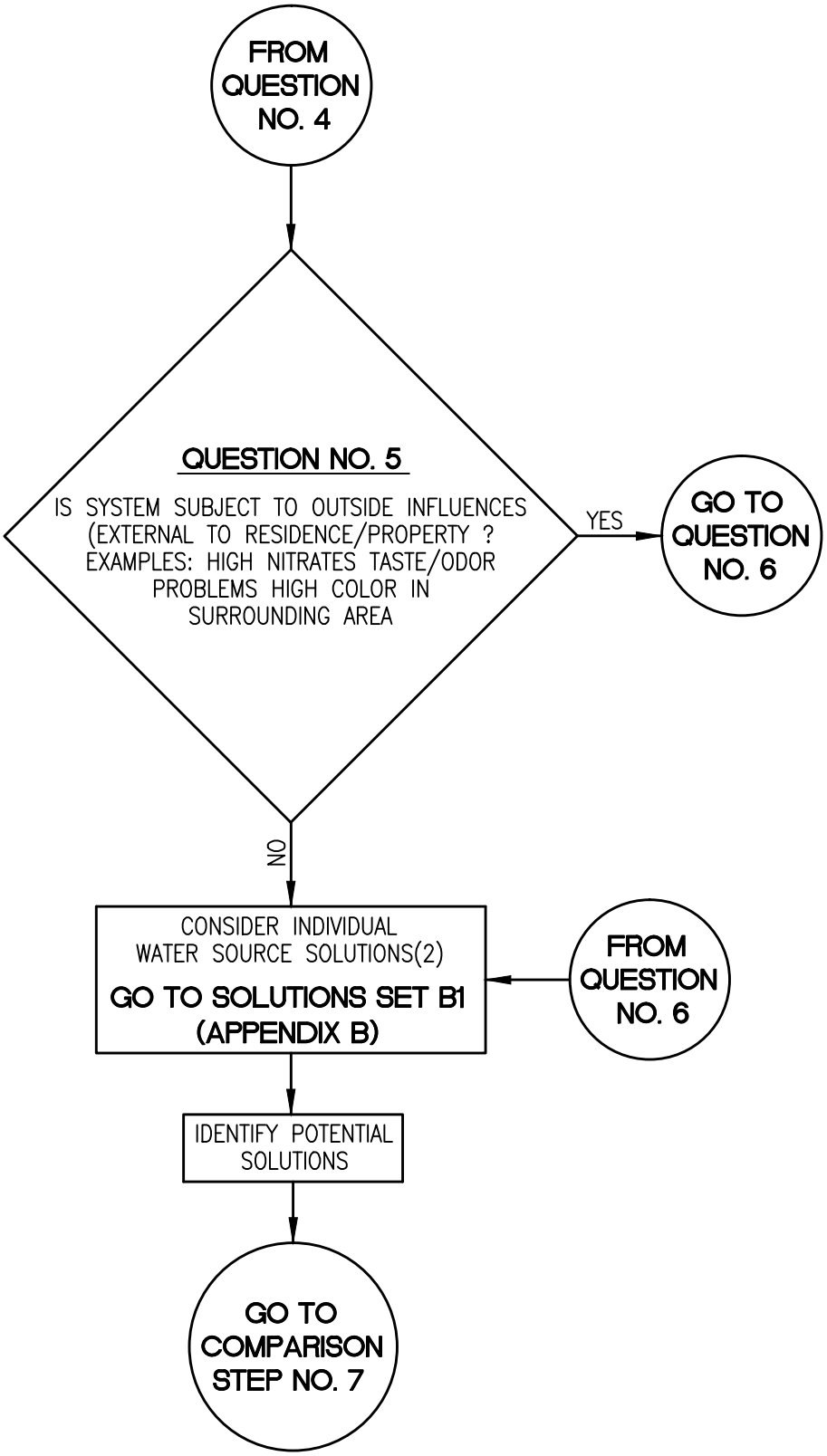
SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY



QUESTION NO. 4

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

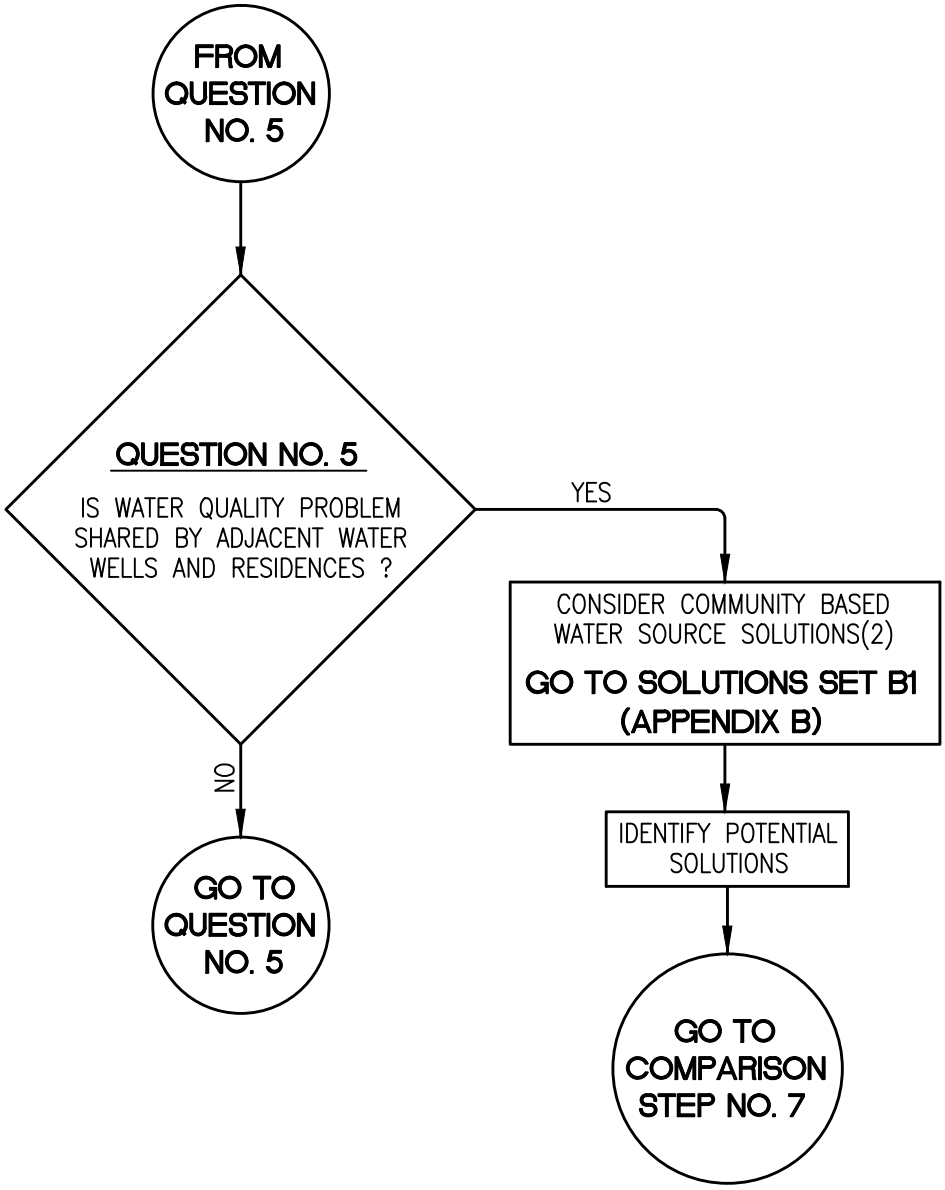
L:\TCDC\(4) GENERAL WATER QUALITY-CHART 2E.Dwg



QUESTION NO. 5

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

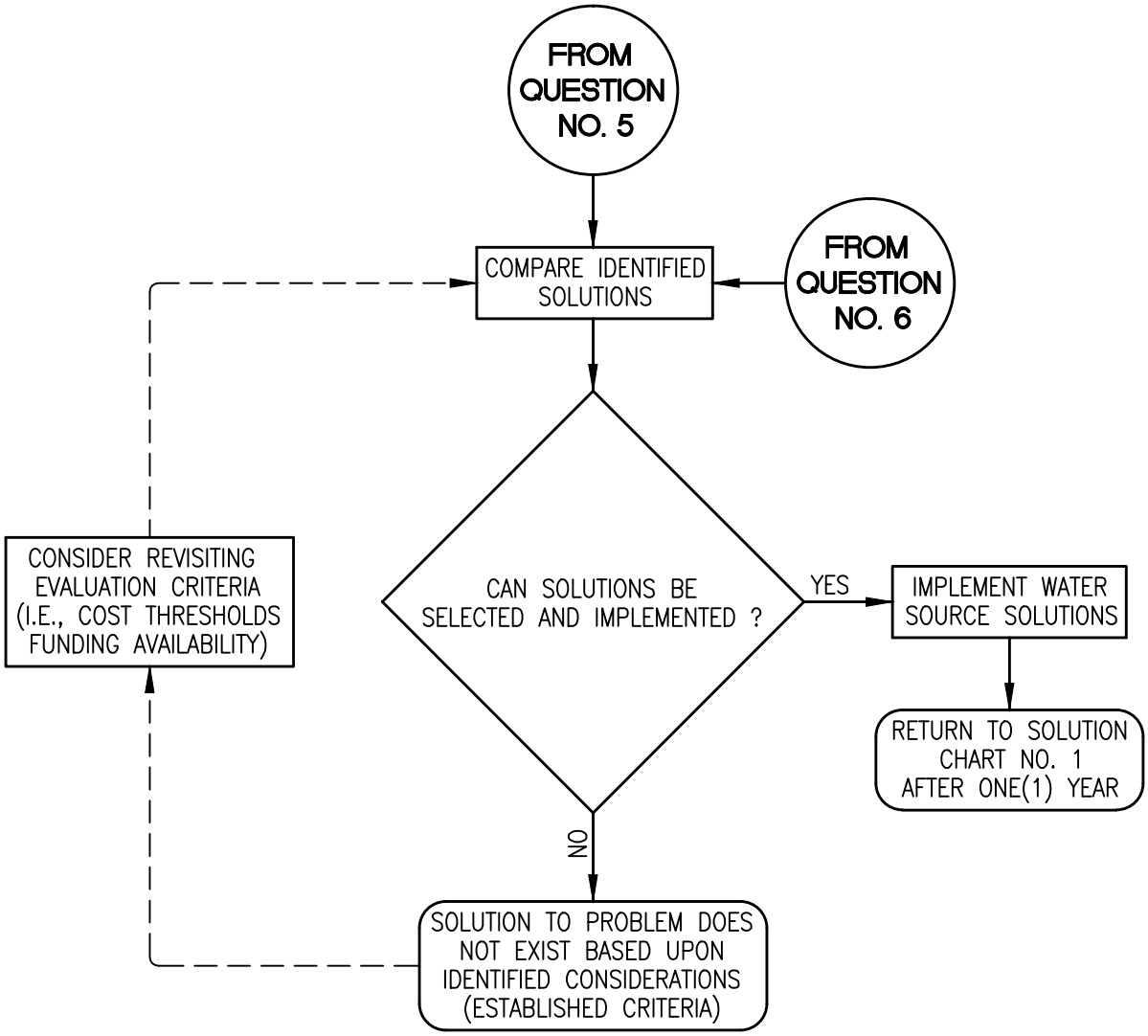
L:\TCDC\(5) GENERAL WATER QUALITY-CHART 2E.Dwg



QUESTION NO. 6

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

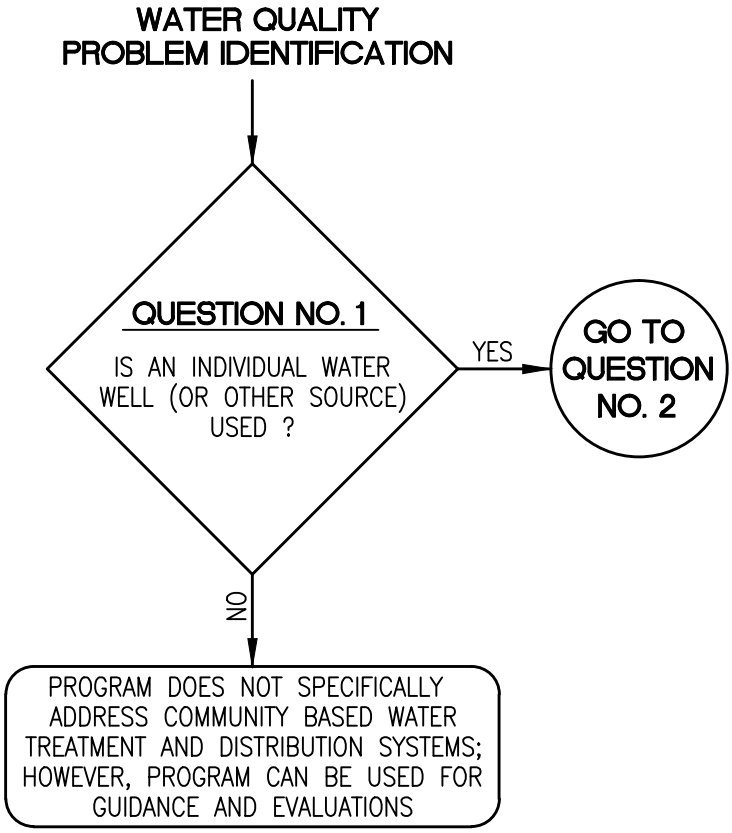
L:\TCDC\(6) GENERAL WATER QUALITY-CHART 2E.Dwg



COMPARISON STEP NO. 7

SOLUTION CHART NO. 2E - WATER QUALITY SOLUTIONS - GENERAL WATER QUALITY
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

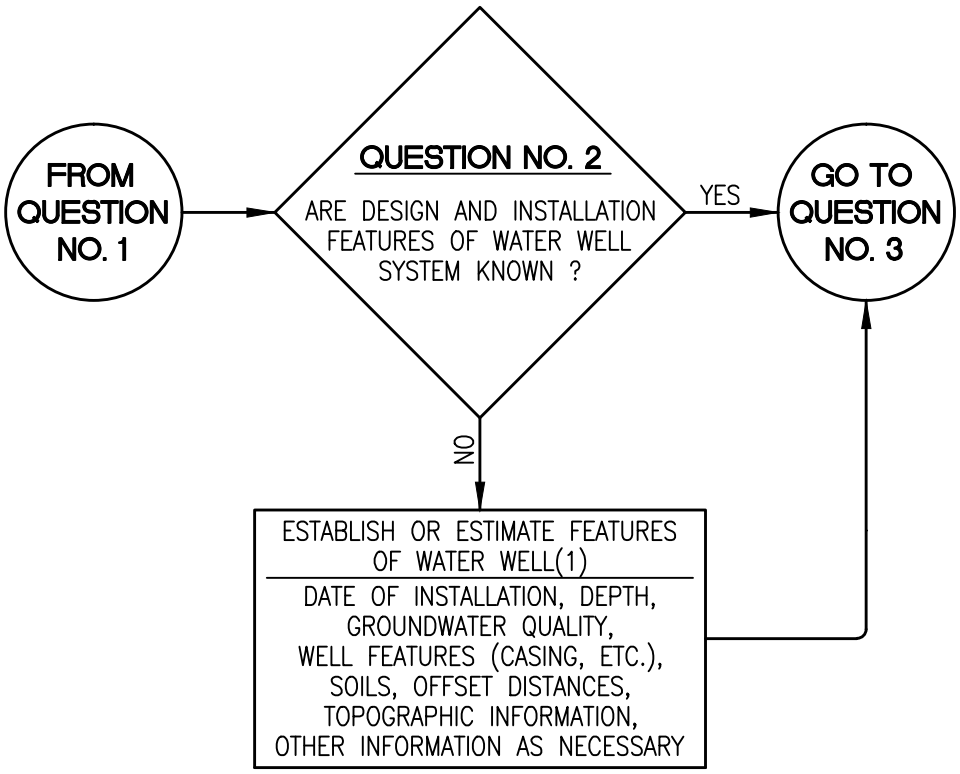
L:\TCDC\(7) GENERAL WATER QUALITY- CHART 2E.Dwg



QUESTION NO. 1

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(1) WATER SUPPLY SOLUTIONS- CHART 3.Dwg

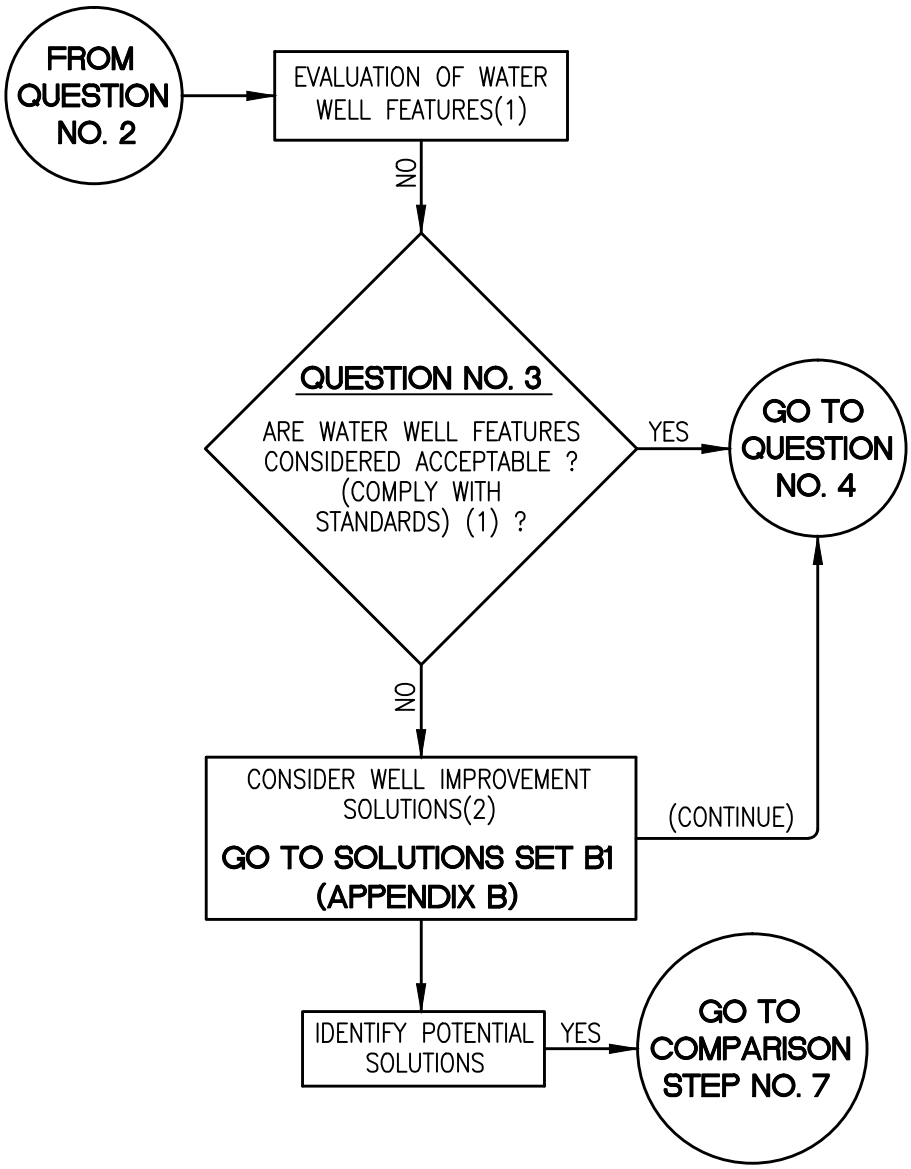


NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY INDIVIDUAL WITH EXPERIENCE IN WATER WELL DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(2) WATER SUPPLY SOLUTIONS- CHART 3.Dwg



NOTES:

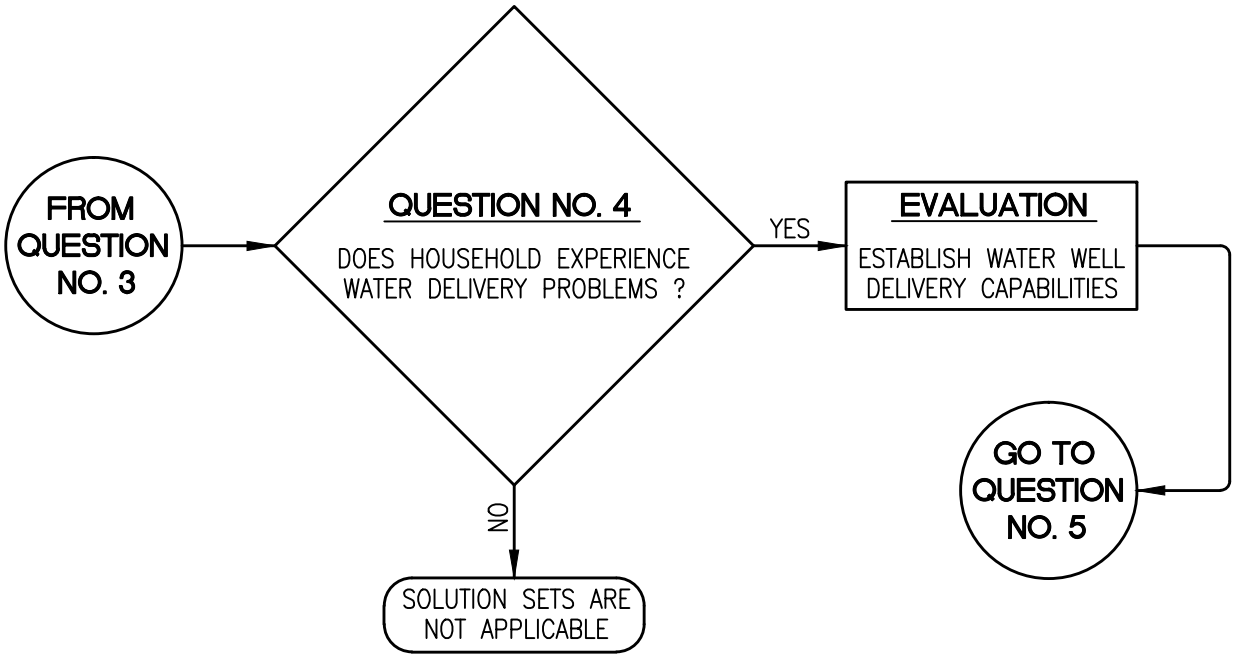
1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN WATER WELL DESIGN, INSTALLATION AND REGULATORY REQUIREMENTS.

2. SOLUTIONS SHOULD BE EVALUATED AND ESTABLISHED BY PERSON(S) EXPERIENCED IN DRINKING WATER TREATMENT. EXAMPLES: DRINKING WATER TREATMENT CONSULTANTS, HEALTH DEPARTMENT REPRESENTATIVES AND WATER TREATMENT EQUIPMENT MANUFACTURERS.

QUESTION NO. 3

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

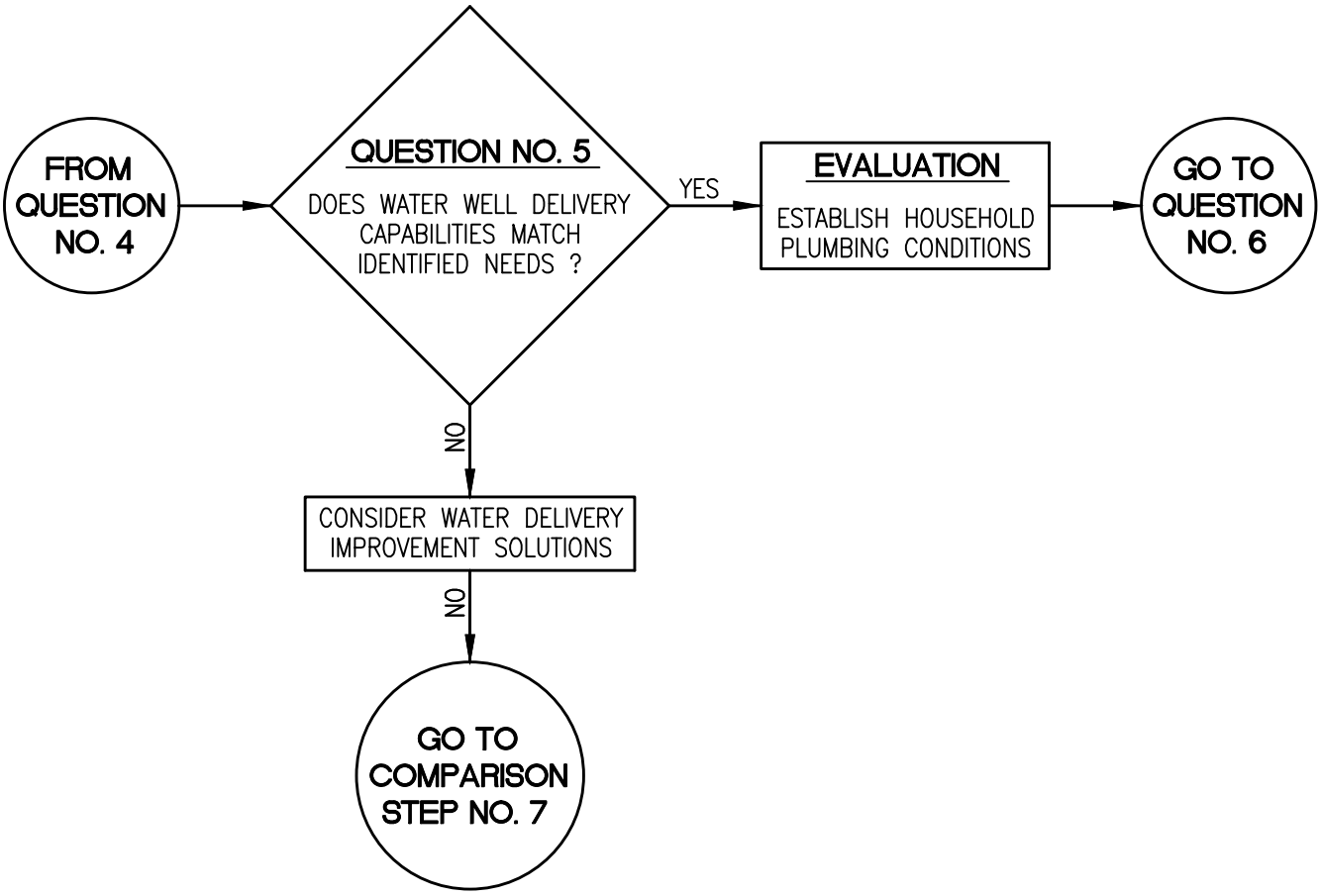
L:\TCDC\(3) WATER SUPPLY SOLUTIONS-CHART 3.Dwg



QUESTION NO. 4

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

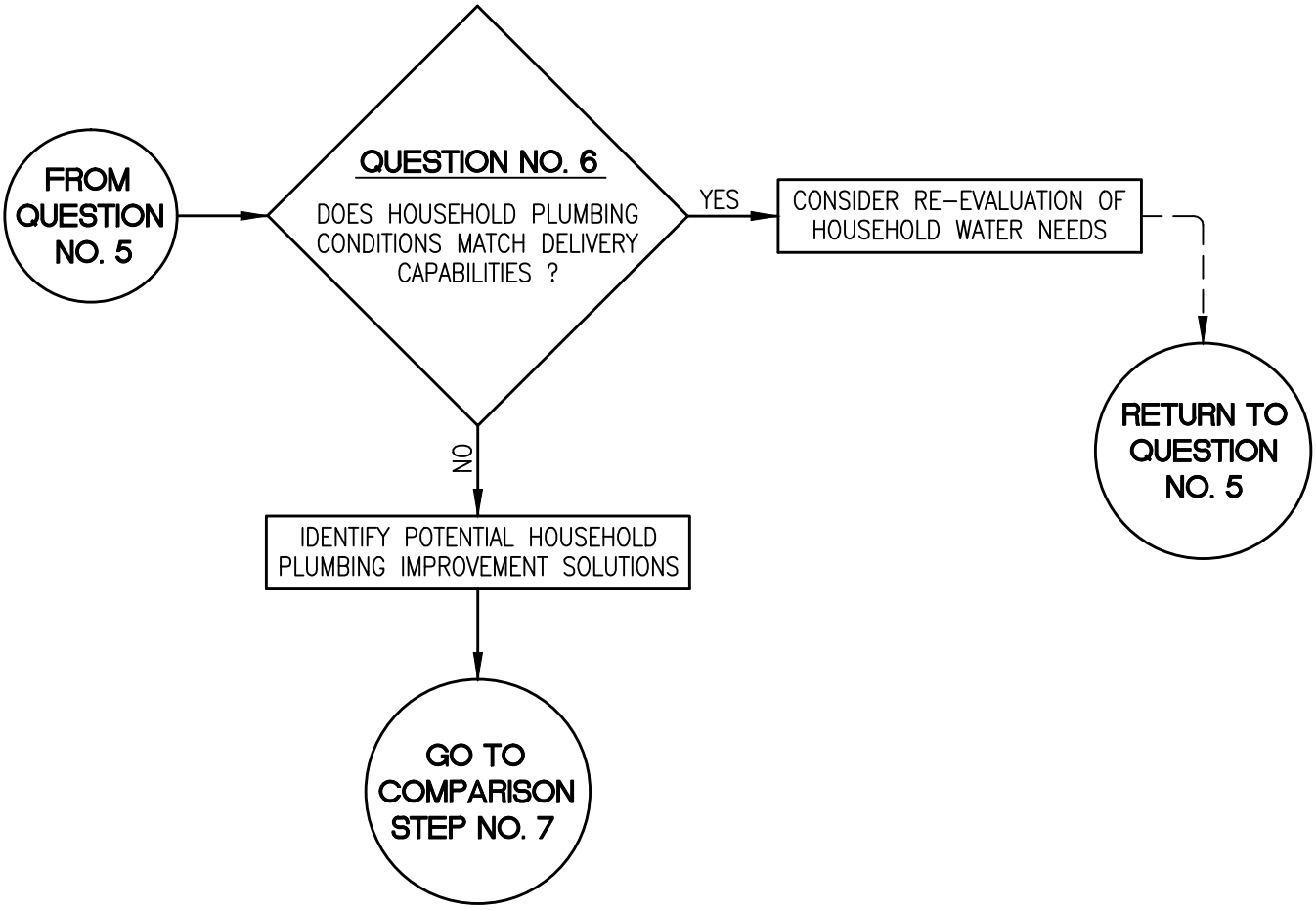
L:\TCDC\(4) WATER SUPPLY SOLUTIONS-CHART 3.Dwg



QUESTION NO. 5

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

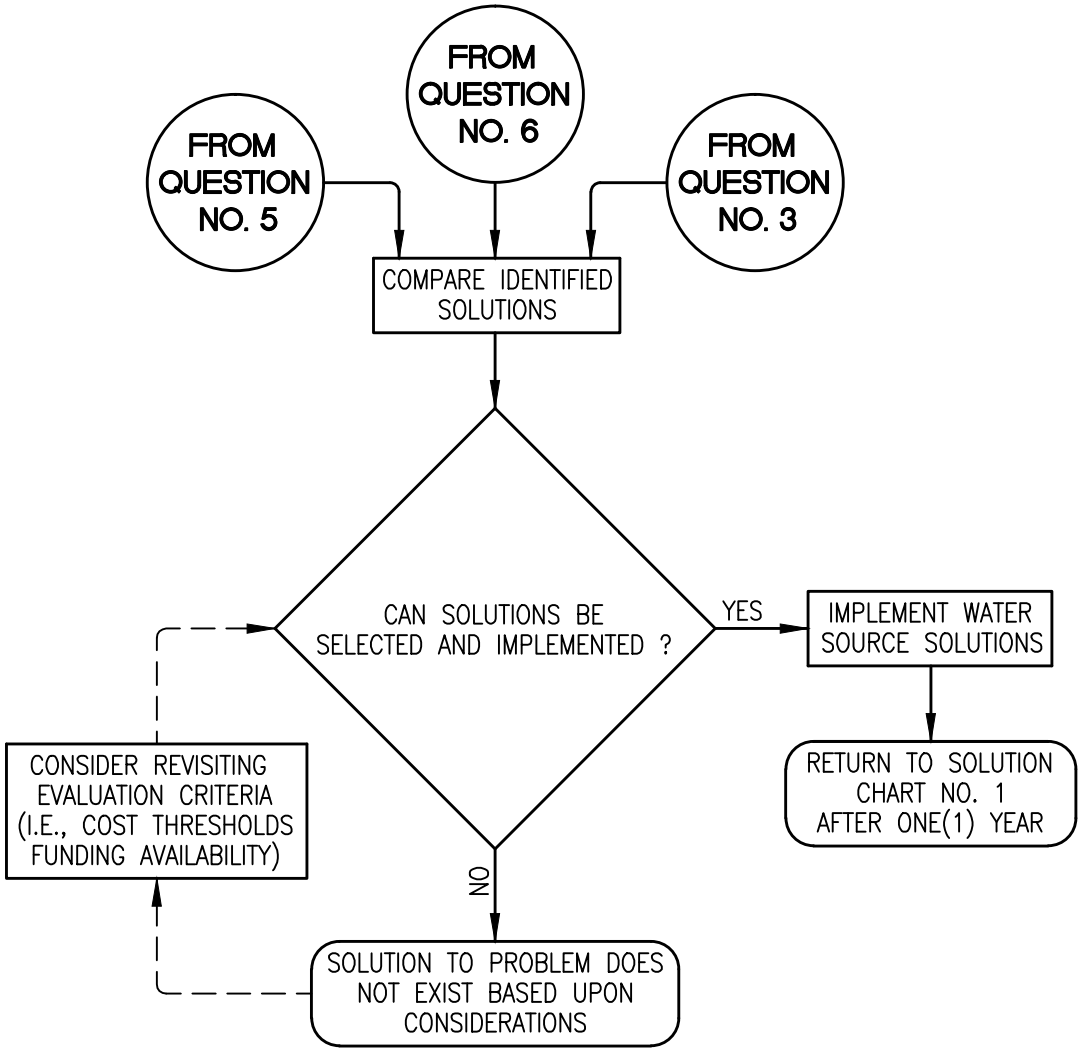
L:\TCDC\(5) WATER SUPPLY SOLUTIONS-CHART 3.Dwg



QUESTION NO. 6

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

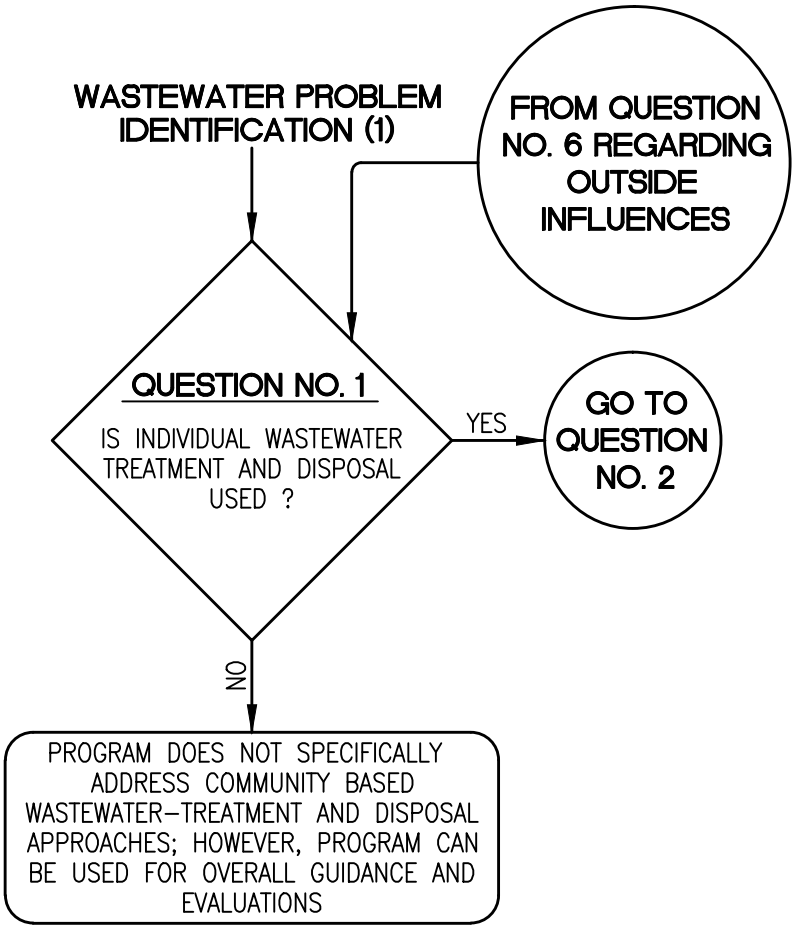
L:\TCDC\(6) WATER SUPPLY SOLUTIONS-CHART 3.Dwg



COMPARISON STEP NO. 7

SOLUTION CHART NO. 3 - WATER SUPPLY SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

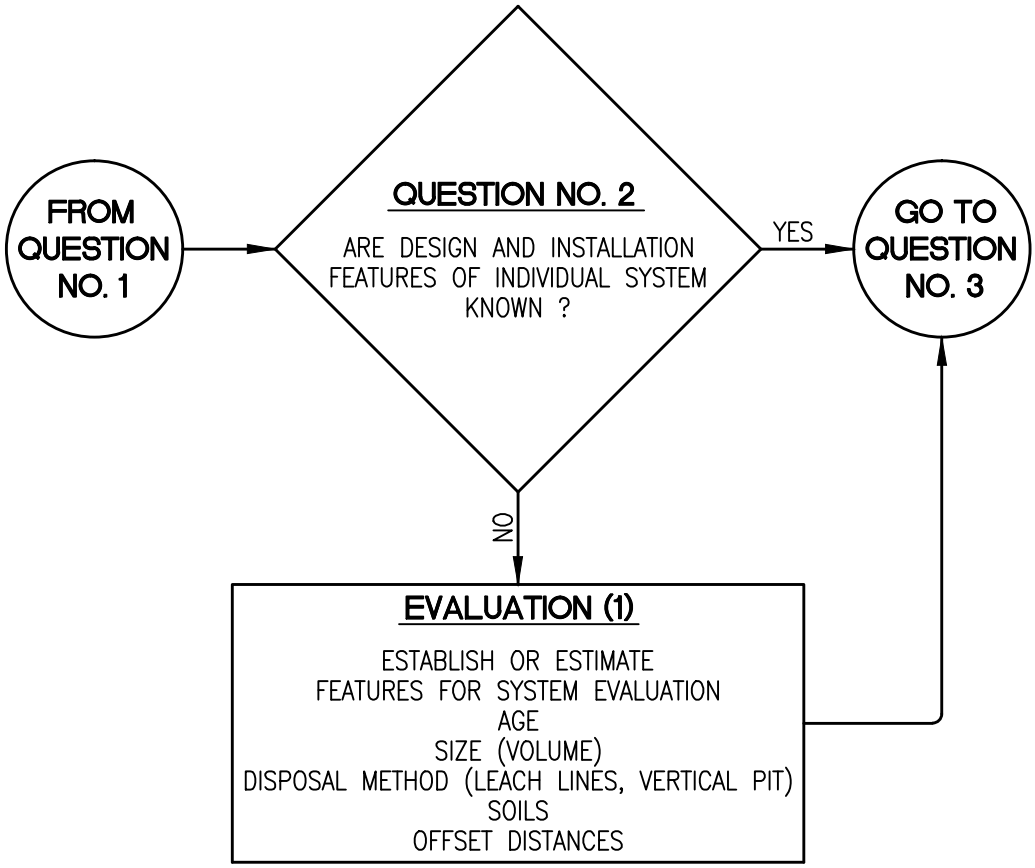
L:\TCDC\(7) WATER SUPPLY SOLUTIONS-CHART 3.Dwg



NOTE:
1. THIS SOLUTION CHART ADDRESSES DEFICIENCIES IN INDIVIDUAL WASTEWATER SYSTEMS.

QUESTION NO. 1

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

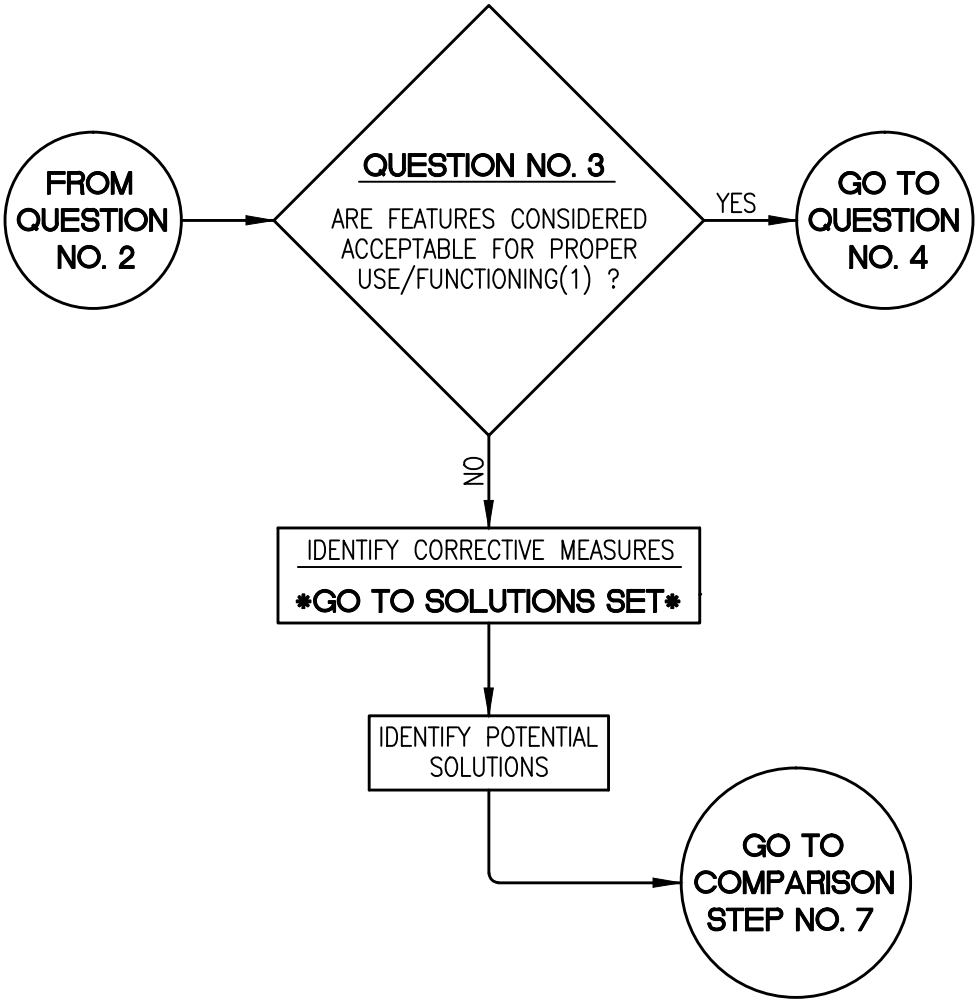


NOTE:
1. EVALUATION SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AND INSTALLATION.

QUESTION NO. 2

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(2) WASTEWATER SOLUTIONS-CHART 4.Dwg

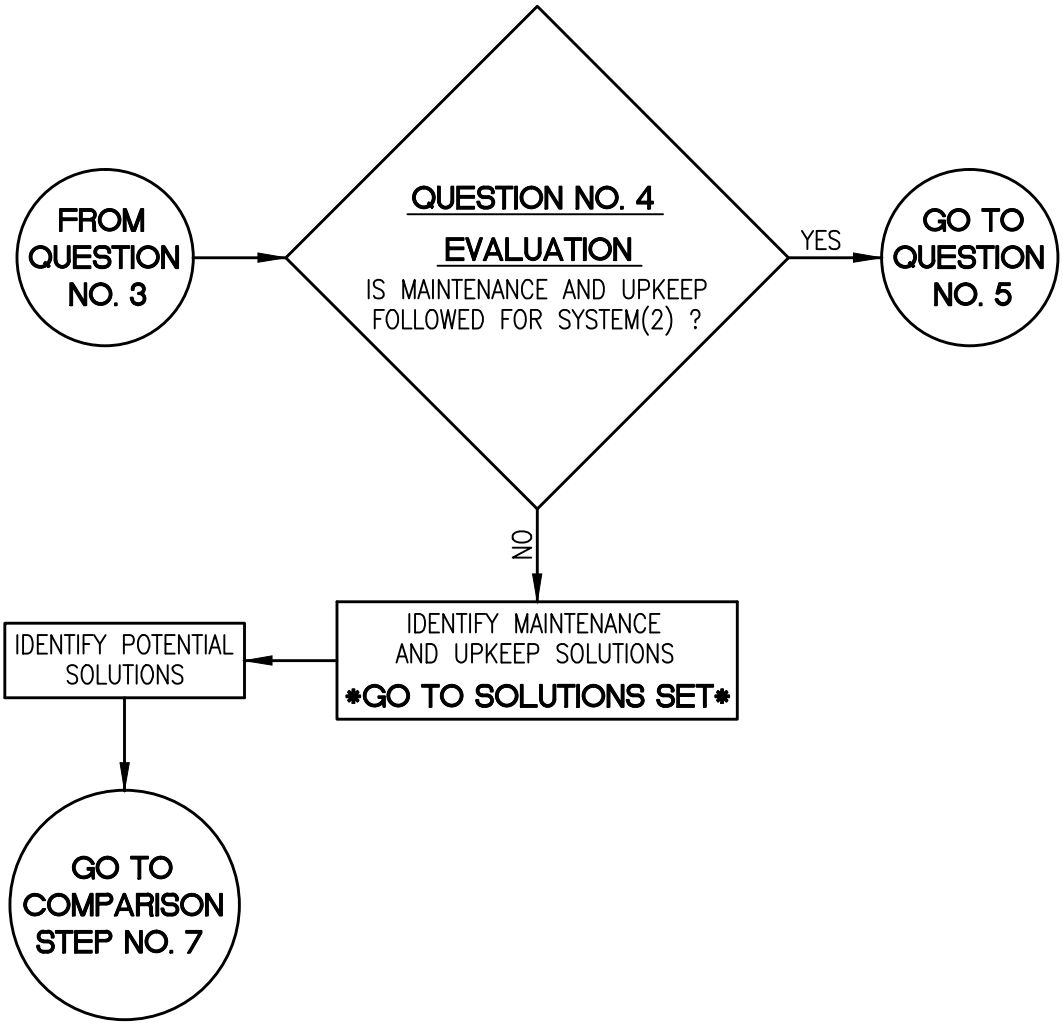


NOTE:
1. INDIVIDUAL SYSTEM EVALUATIONS SHOULD BE CONDUCTED BY PROFESSIONAL WITH EXPERIENCE IN ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AND INSTALLATION.

QUESTION NO. 3

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

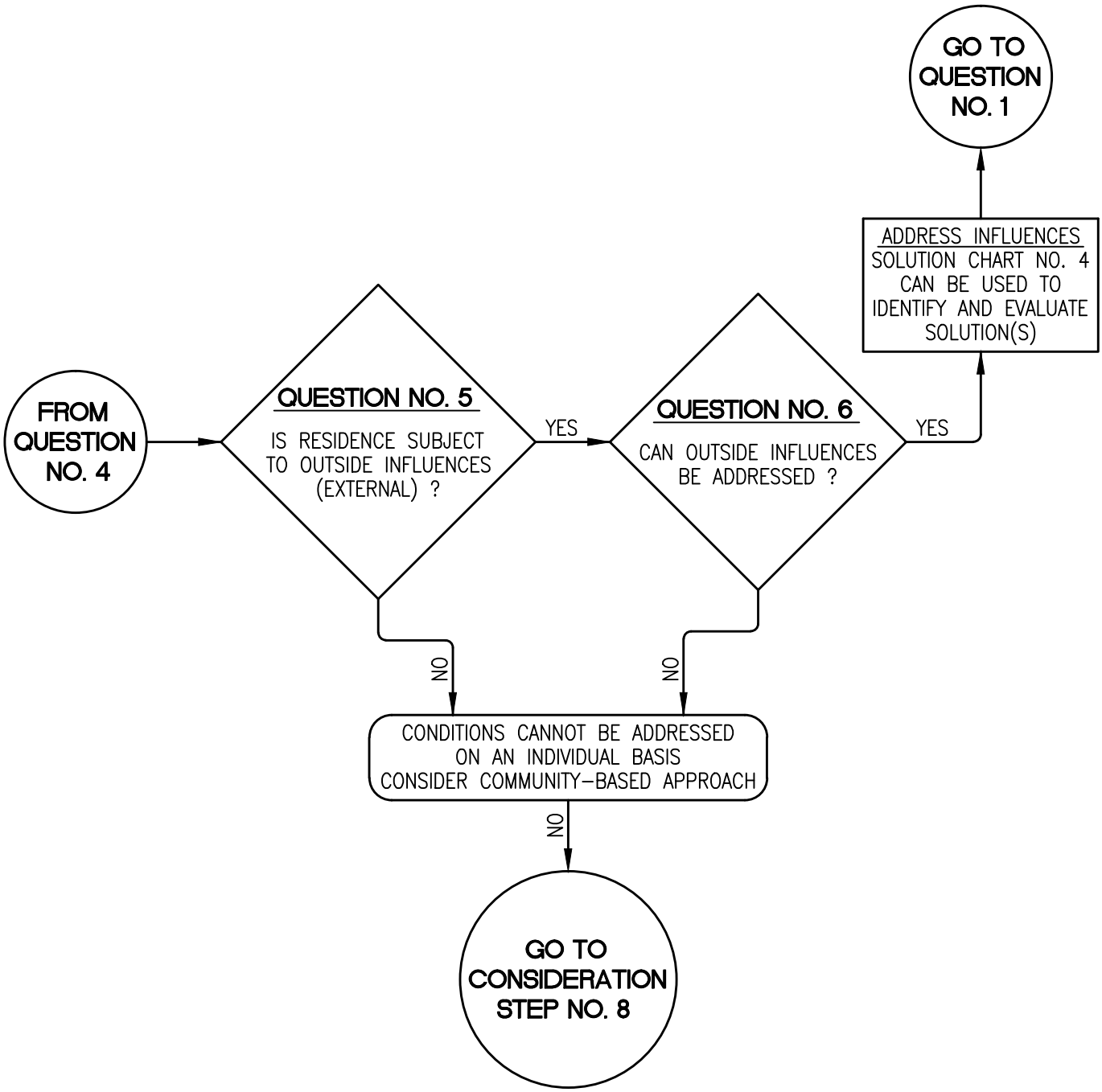
L:\TCDC\(3) WASTEWATER SOLUTIONS-CHART 4.Dwg



QUESTION NO. 4

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

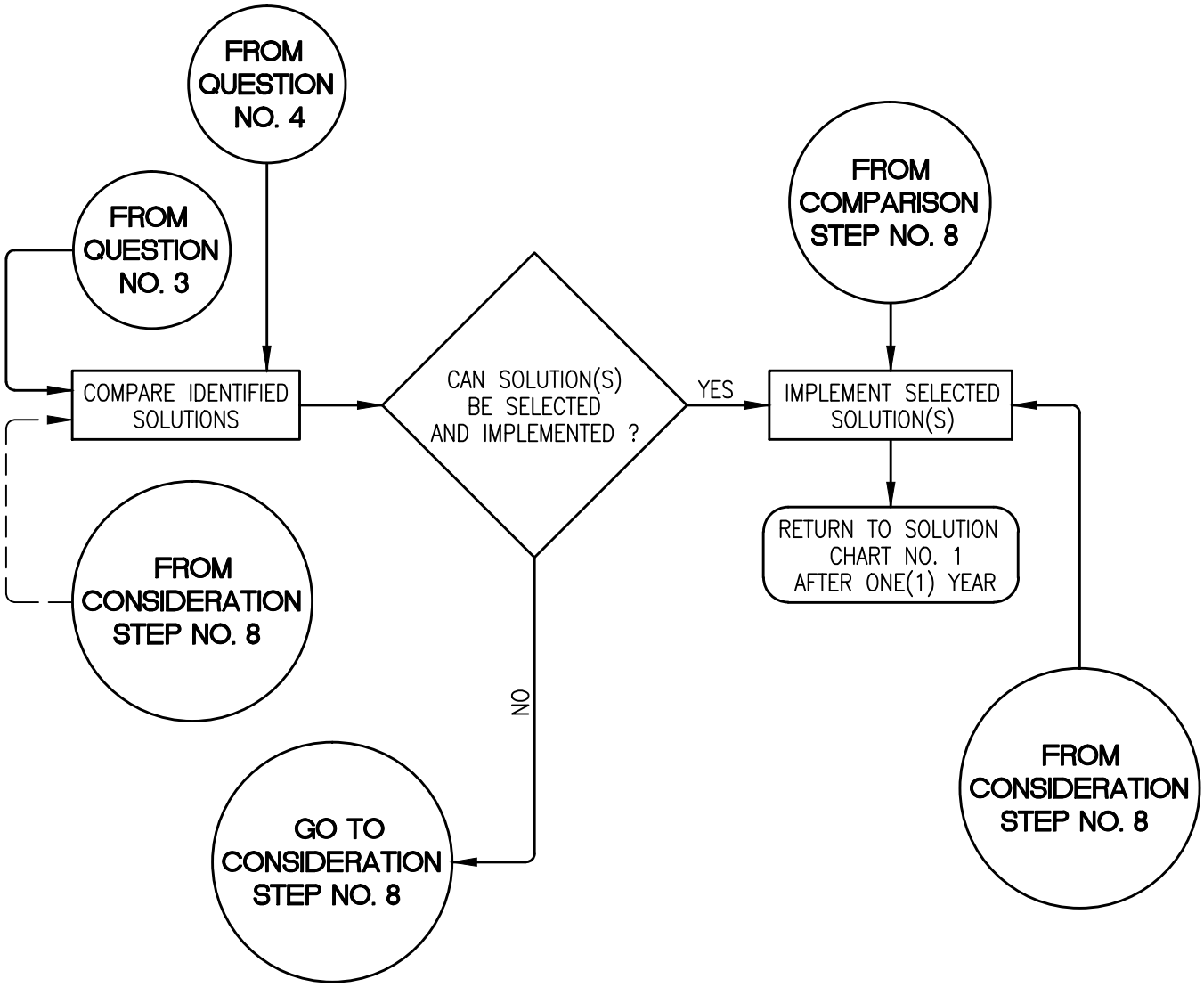
L:\TCDC\(4) WASTEWATER SOLUTIONS-CHART 4.Dwg



QUESTIONS NO. 5 AND NO. 6

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

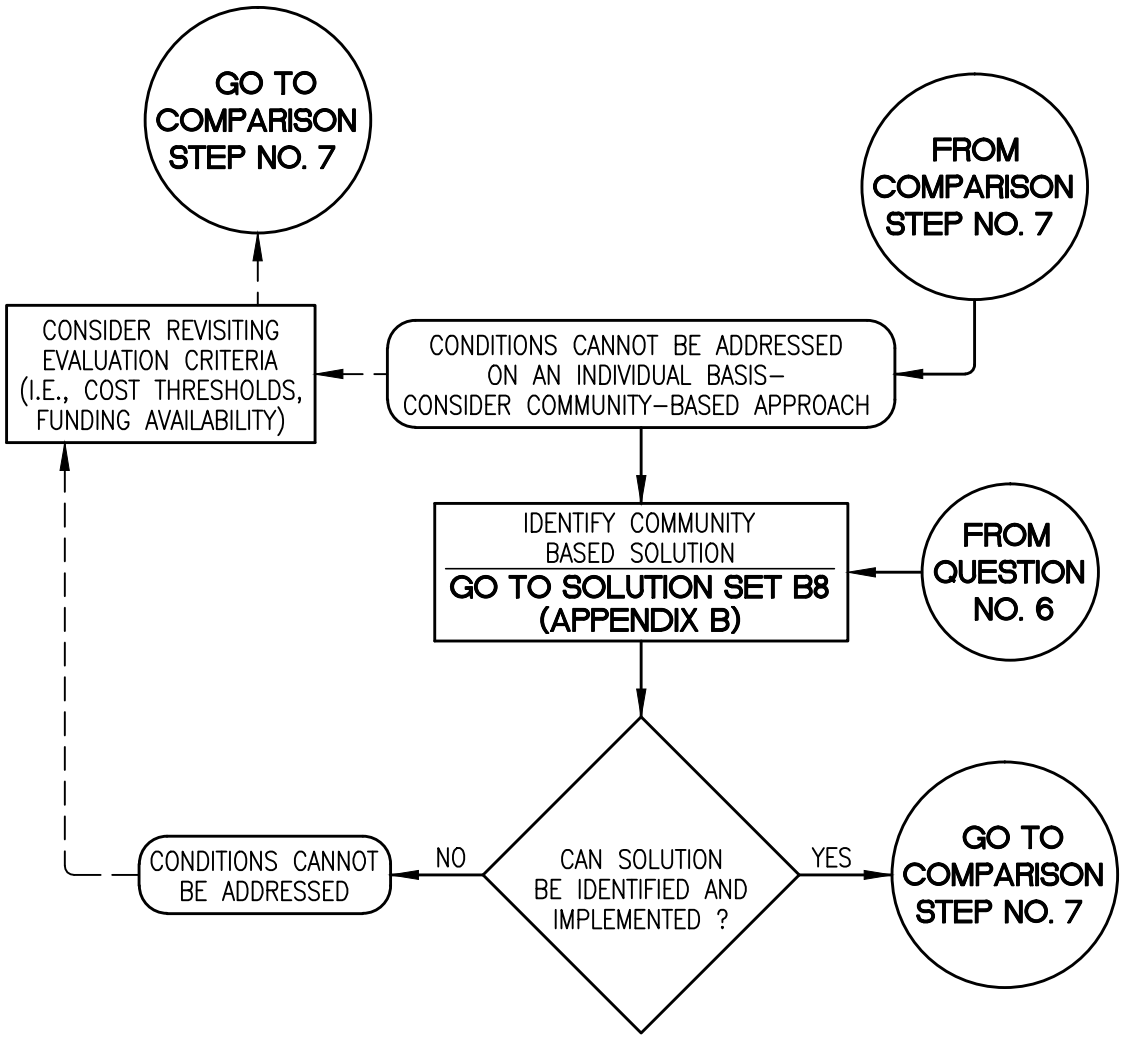
L:\TCDC\(5 AND 6) WASTEWATER SOLUTIONS-CHART 4.Dwg



COMPARISON STEP NO. 7

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(7) WASTEWATER SOLUTIONS-CHART 4.Dwg



CONSIDERATION STEP NO. 8

SOLUTION CHART NO. 4 - WASTEWATER SOLUTIONS
INDIVIDUAL HOUSEHOLD PILOT STUDY
TULARE LAKE BASIN DISADVANTAGED COMMUNITY WATER/WASTEWATER STUDY

L:\TCDC\(8) WASTEWATER SOLUTIONS-CHART 4.Dwg

APPENDIX K

RURAL AND SMALL SYSTEMS GUIDEBOOK TO SUSTAINABLE UTILITY MANAGEMENT, EPA, 2013

USDA

EPA United States Environmental Protection Agency

Rural and Small Systems Guidebook to Sustainable Utility Management

2013



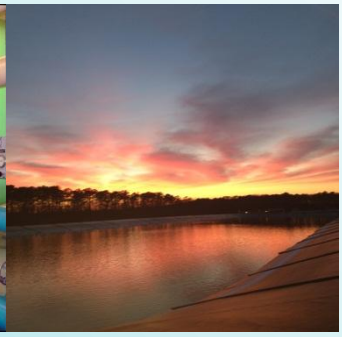



TABLE OF CONTENTS

INTRODUCTION

Background & Purpose

Many rural and small systems throughout the country struggle with various issues, which may include aging or inadequate infrastructure, difficulties recruiting or retaining qualified staff, growing or establishing financial reserves, and setting rates that are reflective of their operational costs.

This *Rural and Small Systems Guidebook to Sustainable Utility Management (Guidebook)* is an important part of a Memorandum of Agreement (MOA) signed by the United States Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA) in 2011 to jointly support a series of activities to help rural and small water and wastewater systems address various issues and more effectively provide sustainable services to the communities they support. As part of this MOA, EPA and USDA hosted a series of four, day-long pilot workshops, which included participants from over 60 rural and small water providers, in cooperation with local sponsors dedicated to small water and wastewater system management. The first workshop was held in Acme, Michigan, in cooperation with the Michigan Rural Water Association, the second in Santa Cruz, California, in cooperation with the Rural Community Assistance Corporation, the third in Helena, Georgia, with the Georgia Rural Water Association, and the fourth in Nashville, Tennessee, with the United South & Eastern Tribes.

The workshops were designed as a pilot project with the intent of each workshop building off of previous ones. Their goal was to provide information to help address rural and small water and wastewater system management concerns and improve rural and small system operations. At each workshop, participants were given an introduction to the management areas described in more detail in this guide, and then were asked to do a short self-assessment of their operations based on the management areas. Participants also identified management improvement opportunities at their systems based on the assessment, and shared experiences from their systems to better understand how to approach implementing the identified improvements and provide a basis for working with staff and community members to operate more effectively. Participants also provided feedback to EPA and USDA on the usefulness of the information used and exercises undertaken during the workshops. Finally, participants were introduced to a compendium of resources that could help them implement the improvements identified during the assessment.

Based on the approaches used in these workshops and feedback from the workshop participants, the *Guidebook* is designed to introduce rural and small water and wastewater systems to the key areas of effectively managed systems. It provides background information on ten key management areas, as well as instruction and assistance on how to conduct a system assessment process based on the key management areas. It also includes information on how to prioritize areas for improvement, while developing measures of progress that can help small systems with performance improvement. In addition to the *Guidebook*, a companion resource was developed for those who wish to host their own workshop. The *Workshop in a Box: Sustainable Management of*

Rural and Small Systems Workshops kit provides guidance for workshop preparations, execution, and copies of all materials necessary to run a successful workshop on utility management improvement.

The *Guidebook's* aim is to support rural and small water and wastewater systems in their common mission to become more successful and resilient service providers. Because of its dynamic nature, this resource can be used effectively in many different ways:

- By system managers, water systems operations specialists and staff as a guide for taking actions leading to short- and long-term improvement to system management and performance;
- By service providers as they work with individual systems or groups of systems through workshops or other assistance efforts;
- As a resource for system improvement workshops, like those sponsored by USDA and EPA;
- As a resource for guiding conversations about sustainability with utility board members; or
- As a resource for communicating and educating utility board members on the importance of effective management.

The information presented in the *Guidebook* draws on the results of four workshops conducted by EPA and USDA described above, as well as feedback from managers of rural and small systems that attended those workshops. Additionally, several small systems and water systems operations specialists provided input to this guide as it was developed.

The *Guidebook* begins by introducing each of the ten key management areas of effectively managed systems, followed by a self assessment to help users identify their strengths and challenges to prioritize where to focus improvement efforts. The *Guidebook* ends by discussing improving outcomes in the ten management areas by examining what constitutes high achievement in each area, and identifying resources for small systems. The overall approach and steps described in this *Guidebook* are similar to the approach in another initiative, called Effective Utility Management, which has been supported by EPA and several major water sector associations since 2008 and used successfully by a number of medium and larger utilities. The *Guidebook* takes the approach embodied in Effective Utility Management and adapts it for the needs of rural and small water and wastewater systems.

What's In It for Me:

Why Should My System Use this Guidebook?

The information in the Guidebook can help rural and small systems in several important ways by:

- *Giving you a simple and objective way to evaluate your system's strengths and areas for improvement*
- *Helping you develop an easy to follow plan for improving your operations based on your assessment*
- *Helping you better communicate internally and with others like board members and customers about your system and your challenges*
- *Help build the necessary support for improving your system over time*

THE SUSTAINABLY MANAGED UTILITY: TEN KEY MANAGEMENT AREAS

The ten key management areas of sustainably managed utilities described here can help rural and small water and wastewater system managers address many ongoing challenges and move toward sustainable management of both operations and infrastructure. In aiming to increase their long-term sustainability and effectiveness, the eventual goal for systems is high achievement, consistent with the needs and expectations of their communities, in each of the management areas.

The management areas were developed by drawing on information and experience from a wide range of rural and small water system operations specialists and managers from across the United States. The management areas were further validated through the workshops held with rural and small systems, sponsored by EPA and USDA. Each management area is described as a desirable outcome for a system to achieve, and can be considered a building block for improving system performance. Through working to improve performance in each of the ten areas, managers can help their systems to become more successful, resilient, and sustainable for the long term.

- Product Quality
- Customer Satisfaction
- Employee & Leadership Development
- Operational Optimization
- Financial Viability
- Infrastructure Stability
- Operational Resiliency
- Community Sustainability & Economic Development
- Water Resource Adequacy
- Stakeholder Understanding & Support

The management areas are not presented in a specific order, but together they make up the framework for a complete and well-rounded management approach. By making improvements in any of the areas, at a pace consistent with its most pressing challenges, a system will be able to deliver increasingly efficient, higher quality services. The graphic below depicts the interconnectedness of the management areas, while also showing that no one area is weighted more heavily than another – all areas are equal in the context of the *Guidebook.*

Descriptions of the management areas are found in the following pages, including the characteristics of successful outcomes for each area.

PRODUCT QUALITY: The system is in compliance with permit requirements and other regulatory or reliability requirements. It meets its community's expectations for the potable water or treated effluent and process residuals that it produces. The system reliably meets customer, public health, and ecological needs.

CUSTOMER SATISFACTION: The system is informed about what its customers expect in terms of service, water quality, and rates. It provides reliable, responsive, and affordable services, and requests and receives timely customer feedback to maintain responsiveness to customer needs and emergencies. Customers are satisfied with the services that the system provides.

EMPLOYEE & LEADERSHIP DEVELOPMENT: The system recruits and retains a workforce that is competent, motivated, and safe-working. Opportunities exist for employee skill development and career enhancement, and training programs are in place, or are available, to retain and improve their technical and other knowledge. Job descriptions and performance expectations are clearly established (in writing), and a code of conduct is in place and accepted by all employees.

OPERATIONAL OPTIMIZATION: The system ensures ongoing, timely, cost-effective, reliable, and sustainable performance in all aspects of its operations. The key operational aspects of the system (e.g., pressure,

flow, quality) are documented and monitored. It minimizes resource use, loss, and impacts from day-to-day operations. It has assessed its current energy use and water loss and performed related audits.

FINANCIAL VIABILITY: The system establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. The rates that it charges are adequate to pay its bills, put some funds away for both future capital expenditures and unanticipated issues, and maintain, repair, and replace its equipment and infrastructure as needed. The system discusses rate requirements with its customers, decision making authorities, and other key stakeholders.

INFRASTRUCTURE STABILITY: The system understands the condition and costs associated with its critical infrastructure assets. It has inventoried its system components, conditions, and costs, and has a plan in place to repair and replace these components. It maintains and enhances the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable level of risk.

OPERATIONAL RESILIENCY: The system ensures that its leadership and staff members work together to anticipate and avoid problems. It proactively identifies legal, financial, non-compliance, environmental, safety, security, and natural threats to the system. It has conducted a vulnerability assessment for safety, natural disasters, and other environmental threats, and has prepared an emergency response plan for these hazards.

COMMUNITY SUSTAINABILITY & ECONOMIC DEVELOPMENT: The system is active in its community and is aware of the impacts that its decisions have on current and long-term future community health and welfare. It seeks to support overall watershed, source water protection, and community economic goals, where feasible. It is aware of, and participates in, local community and economic development plans.

WATER RESOURCE ADEQUACY: The systems ensure that water availability is consistent with current and future customer needs. It understands its role in water availability, and manages its operations to provide for long-term aquifer and surface water sustainability and replenishment. It has performed a long-term water supply and demand analysis, and is able to meet the water and sanitation needs of its customers now and for the reasonable future.

STAKEHOLDER UNDERSTANDING & SUPPORT: The system actively seeks understanding and support from decision making bodies, community members, and regulatory bodies related to service levels, operating budgets, capital improvement programs, and risk management decisions. It takes appropriate steps with these stakeholders to build support for its performance goals, resources, and the value of the services that it provides, performing active outreach and education to understand concerns and promote the value of clean, safe water and the services the utility provides, consistent with available resources.

SYSTEM IMPROVEMENT PRIORITIES: SELF ASSESSMENT

A useful first step in identifying where a system should start making improvements in the ten management areas is completing a candid and comprehensive self assessment. The self assessment included in this guide is designed to help rural and small systems identify their strengths and challenges to prioritize where efforts and resources should be focused. It can be completed by a number of different individuals within a utility (e.g., managers, staff), or as a team exercise amongst management, staff, and external stakeholders such as board members or customers (if appropriate). If used as a team exercise, it is recommended that each participant complete the assessment on his/her own, followed by a group discussion about the similarities and differences in results. Regardless of how the utility uses the assessment, the goal for all systems should be high achievement, consistent with the needs and expectations of their communities, in each of the management areas.

The self assessment has three main steps:

1) Rate achievement for each management area;
2) Rank the importance of each management area; and
3) Plot results to identify critical areas for improvement.

Once completed, the self-assessment exercise can help the systems to develop a plan for improving its outcomes in the management areas.

The Self Assessment Worksheet

STEP 1 – RATING ACHIEVEMENT AREAS

Assess your system by rating your current level of achievement for each management area. Consider how effectively your current management efforts support each of the areas, and note that each management area has several dimensions (represented by the bullet points listed for each). Your rating should reflect the dimension with the lowest level of achievement. For example, if you felt that your achievement in one dimension of a management area was low, but your achievement in another dimension of that area was high, your overall rating for the area would be low. An example of the rating exercise can be found on the following page.

Scale from low achievement to high achievement:

- Select **Low** if your system has no workable practices in place for addressing this area – very low capacity and performance.
- Select **Medium** if your system has some workable practices in place with moderate achievement, but could improve – some capacity in place.
- Select **High** if your system has effective, standardized, and accepted practices in place. It either usually or consistently achieves goals – capacity is high and in need of very little or no further development.

YOUR TURN: Proceed to Table A in Appendix I and fill out the column labeled "Step 1" for each management area before moving to Step 2.

STEP 2 - RANKING PRIORITY AREAS

Rank the importance of each management area to your system. Base this ranking on your goals and the specific needs of your community. Your ranking may be influenced by current or expected challenges (e.g., if your community is experiencing elevated population growth rates, Water Resource Adequacy may be ranked as a high priority area to address). Again, note that each management area has multiple dimensions (represented by the bullet points listed) – your ranking should represent the highest priority of all of the points listed, and should be ranked independently of the achievement level (i.e., an area can remain, and therefore be ranked, as a high priority even if the utility is already undertaking needed improvement efforts). An example of the rating exercise can be found on the following page.

Scale from low priority to high priority, keeping in mind the following:

- Current or expected challenges
- Customer or stakeholder impact (reliability, quality, timeliness)
- Consequences of not improving (non-compliance, increased cost, lost credibility, impacts to health and safety)
- Urgency (near or long term needs)
- Community priorities

YOUR TURN: Proceed to Table A in Appendix I and fill out the column labeled "Step 2" for each management area before moving to Step 3.

TABLE A: EXAMPLE

Key Management Area	Management Area Description	Step 1: Rate Achievement (Low – High)	Step 2: Rank Priority (Low – High)
1. Water Resource Adequacy **(e.g., water quantity)**	• My system is able to meet the water or sanitation needs of its customers now and for the reasonable future. • My system or community has performed a long-term water supply and demand analysis. (Applies to drinking water systems only.) • My system understands its relationship to local water availability. (Drinking water utilities should focus on utilization rates relative to any local water stress conditions, wastewater utilities should focus on return flows.)	Low	High
2. Product Quality **(e.g., clean & safe water)**	• My system is in compliance with permit requirements and other regulatory or reliability requirements. • My system meets local community expectations for the potable water and/or treated effluent and process residuals that it produces.	Medium	High
3. Customer Satisfaction	• Customers are satisfied with the services the system provides. • My system has procedures in place to receive and respond to customer feedback in a timely fashion.	High	Medium
4. Community Sustainability & Economic Development	• My system is aware of and participating in local and regional community and economic development planning activities. • My system's goals also help to support overall watershed and source water protection, and community economic goals.	High	Low
5. Employee & Leadership Development	• Training programs are in place to retain and improve institutional knowledge. • Opportunities exist for employee skills development and career enhancement. • Job descriptions, performance expectations, and codes of conduct are established.	Low	Medium
6. Financial Viability	• The rates that my system charges are adequate to pay our bills, put some funds away for the future, and maintain, repair, and replace our equipment and infrastructure as needed. (O&M, debt servicing, and other costs are covered). • My system discusses rate requirements with our customers, board members, and other key stakeholders.	Medium	High
7. Operational Optimization **(e.g., energy/water efficiency)**	• My system has assessed its current energy usage and performed an energy audit. • My system has maximized resource use and resource loss (e.g., water loss, treatment chemical use). • My system understands, has documented, and monitors key operational aspects of the system (e.g., pressure, flow, quality).	Medium	Medium
8. Infrastructure Stability **(e.g., asset management practice)**	• My system has inventoried its current system components, condition, and cost. • My system has a plan in place for repair and replacement of system components.	Low	Medium
9. Operational Resiliency	• My system has conducted an all hazards vulnerability assessment (safety, natural disasters, environmental risks, etc.). • My utility has prepared an all hazards emergency response plan.	Medium	Low
10. Stakeholder Understanding & Support	• My system actively engages with local decision makers, community, watershed (where relevant), and regulatory representatives to build support for its goals, resources, and the value of the services it provides. • My system performs active customer and stakeholder outreach and education to understand concerns and promote the value of clean and safe water.	Low	Low

STEP 3 - PLOT RESULTS

To compare your results for each management area, you will plot each pair (rating, ranking) in Table B of Appendix I. For each management area, identify your high/medium/low rating in the green Step 1 box, and find the corresponding row in the table. Then, for the same management area, identify your high/medium/low ranking in the blue Step 2 box, and find the corresponding column in the table. The box where the row and column intersect is where you should place that management area (note abbreviations below for use in the plotting exercise). The example below shows how the plotting exercise in Step 3 should be completed. The ranking and rating for each management area should be paired and placed into the corresponding box in the grid, based on the low/medium/high determinations given in Steps 1 and 2.

WA	Water Resource Adequacy	FV	Financial Viability
PQ	Product Quality	OO	Operational Optimization
CS	Customer Satisfaction	IS	Infrastructure Stability
CE	Community Sustainability & Economic Development	OR	Operational Resiliency
ED	Employee & Leadership Development	SS	Stakeholder Understanding & Support

TABLE B: EXAMPLE

Key Management Area	Management Area Description	Step 1: Rate Achievement (Low – High)	Step 2: Rank Priority (Low – High)
1. Water Resource Adequacy (e.g., water quantity)	• My system is able to meet the water or sanitation needs of its customers now and for the reasonable future. • My utility or community has performed a long-term water supply and demand analysis. (Applies to drinking water systems only) • My system understands its relationship to local water availability. (Drinking water utilities should focus on utilization rates relative to any local water stress conditions, wastewater utilities should focus on return flows)	Low	High
2. Product Quality (e.g., clean & safe water)	• My system is in compliance with permit requirements and other regulatory or reliability requirements. • My utility meets local community expectations for the potable water and/or treated effluent and process residual that it produces.	Medium	High
3. Customer Satisfaction	• Customers are satisfied with the services my system provides. • My system has procedures in place to receive and respond to customer feedback in a timely fashion.	High	Medium

Rating (Achievement)				
	High		CS	
	Medium			PQ
	Low			WA
		Low	Medium	High
		Ranking (Priority)		

YOUR TURN: Complete the plotting exercise in Step 3 in Table B of Appendix I before moving to Step 4.

STEP 4 - ANALYZE RESULTS:

Examining the results of the plotting exercise in Step 3 can help identify management areas on which to focus improvement efforts. Generally speaking, management areas that fall into the **red box** are both **very important and need improvement,** meaning that they should be seen as a top priority for improvement. Management areas that land in the **yellow boxes** should be next on the list for improvement efforts, and those that fall into the **white boxes** are important to consider for long-term improvement efforts, but likely do not need to be prioritized for immediate action. The eventual goal for all utilities should be high achievement in each of the management areas.

QUESTIONS TO CONSIDER:

Where is my system strong?

Where is there the most room for improvement?

What should my areas of focus be?

Why are these areas priorities?

A good way to identify and prioritize the actions is to create a utility management improvement plan, which should be incorporated, as appropriate, into the utility's annual budget and coordinated with its capital improvement plans. The improvement plan should be tied directly to the analysis of the self-assessment results described above.

The results of the self assessment and an improvement plan can act as building blocks for long-range planning. Preparing a long-range plan involves taking a long-term view of each of the system's goals and establishing a clear vision and mission. Improvement goals and plans from the utility management improvement plan for each priority management area should be included in a utility's long-range plan in a logical sequence, in addition to plans for maintaining high achievement in the areas of current strong performance. Even if the utility does not have a long-range plan, it is important to develop the improvement plan based on the self-assessment. Utilities are encouraged to repeat the assessment as changes to its system operations or infrastructure are made.

Types of Plans:

System Management Improvement Plan: A plan that addresses specific areas of utility management that need improvement. This type of plan should be designed around the assessment of the management areas presented in this *Guidebook.*

Capital Improvement Plan: A mid-term plan (typically over a period of four to ten years) that identifies capital projects and equipment purchases. It provides a planning schedule and identifies options for financing each item.

Long-Range Plan: A plan that addresses future outcomes to help meet goals over a long period of time (typically over a period of twenty years or more) by evaluating an organization and the environment in which it operates.

IMPROVING OUTCOMES

To create a successful systems management improvement plan, it is important to have at least a basic understanding of the following items:

- What it means to accomplish "high achievement" in each area;
- The changes a system will need to make to reach this level;
- The challenges that may arise for each management area; and
- How to track performance and progress.

This section of the *Guidebook* is designed to help systems develop a strategy for addressing each of these components of becoming a more sustainable and resilient system.

How to Succeed in Each Management Area: High Achievement and Common Challenges

Once a system has decided to improve its performance in one or more of the key management areas, the next step is to develop and implement a plan. To create a plan, it is important to have an idea of what challenges may arise, and what practices can be adopted to address each area. Found on the following pages are overviews of challenges and effective practices for five management areas that were discussed in-depth at the small system workshops that served as background for the *Guidebook*. Also included are examples of ways in which systems can measure their performance in each management area.

QUESTIONS TO CONSIDER FOR EACH MANAGEMENT AREA:

What will constitute 'high achievement' in this area?

What factors have led to performance gaps in this area?

What changes will my utility need to make to improve performance?

Who will need to be involved for changes to take place?

How will my utility track performance progress?

What will be the biggest challenges to performance improvement?

Are there external resources that can support the improvement of performance in this management area?

EMPLOYEE & LEADERSHIP DEVELOPMENT

> **Try This:**
>
> Develop relationships with neighboring systems to share training resources.

Challenges specific to **Employee & Leadership Development** include:

- Employee motivation and opportunities for development can be hampered by a lack of resources.
- Not having access to training opportunities can prevent personal and professional development.
- Not having written job responsibilities can lead to uncertainty about management expectations and a lack of recognition for the work that is done.
- Time constraints on employees.

Examples of actions taken by high performing utilities in **Employee & Leadership Development** include:

- Have programs in place to retain and improve institutional knowledge, such as a "living document" with best practices for different areas of utility operations that is updated regularly (e.g., have a "best practices" document that includes sections for each area of operation, and every six months ask an operator from each area to review the content and make updates as necessary).
- Ensure that staff members are cross-trained (i.e., more than one staff member can do a specific job).
- Allow employees to work non-traditional schedules (e.g., a modified overtime schedule) to allow for on-the-job-training (e.g., job shadowing of other employees as a part of cross-training).
- Identify and schedule key training events that staff members are required to attend. Whenever possible, make training events short and focused, and build them into the regular work day.
- Establish and clearly communicate staff performance requirements (e.g., create a table of capabilities for successful performance in the different positions and review with staff annually).
- Create an outreach plan to attract qualified staff (e.g., with local schools or veteran's associations).
- Create incentive programs to retain staff, encourage training, or encourage staff to take on additional duties (e.g., monthly or quarterly recognition/awards for staff that have gone above and beyond their regular duties or competition between staff members for accruing the most training hours in a set period of time).
- Develop training module templates for how to conduct trainings on different topics. Include presenter notes and materials for participants.
- Check in with staff regularly to identify new training needs.
- Create partnerships with the system's insurance agency or state water organization to benefit from free or reduced rate training programs that they may offer.
- Help train, or otherwise assist, staff from neighboring utilities.

Measures that you might consider for tracking accomplishments in Employee & Leadership Development:

- **Employee turnover rate:** $\frac{\textit{Number of employee departures per year}}{\textit{Number of total positions per year}}$
- **Employee job satisfaction rate:** $\frac{\textit{Number of employees satisfied with their jobs per year}}{\textit{Total number of employees per year}}$
- **Annual training hours per employee**

FINANCIAL VIABILITY

> **Try This:**
>
> Undertake a rate study to determine if current rates are adequate to meet both current and future needs.

Challenges specific to **Financial Viability** include:

- It is uncomfortable and politically challenging to discontinue service to neighbors, acquaintances, elderly customers, or fixed income customers who have not paid their bills.
- It is difficult to communicate to elected officials and consumers about how much it costs to produce drinking water and process wastewater, making it a challenge to get rate increases approved.
- Customers feel that flat rate billing practices are unfair (low volume users paying the same as high volume users).
- Many times, board members were elected by running on the platform of no rate increases.

Examples of actions taken by high performing utilities in **Financial Viability** include:

- Discuss rate requirements and related system repair requirements with its customers, board members, and other key stakeholders so that there is a better understanding within the community of why rate decisions and changes are made. (Consider using a respected member of the community to facilitate this discussion).
- Have a study on rate requirements conducted by an independent consultant (e.g., National Rural Water Association, Rural Community Assistance Partnership) to back up discussions about rate requirements.
- Establish predictable rates, consistent with community expectations and acceptability.
- Have financial accounting policies and procedures in place.
- Have ordinances in place for automatic rate increases tied to cost of living increases.
- Set aside funds for reserves (i.e., have a "rainy day" fund).
- Increase equity in billing practices by using meters whenever possible.
- Conduct quarterly budget reviews.
- Identify priorities for system improvements to aid in allocation of available funds.
- Improve practices for reducing the number of outstanding bills (e.g., limit the carry-forward balance to a fixed amount or increase service connection fees or service deposits to discourage customers who move frequently or avoid paying their bills).
- Create incentives for early bill payment (e.g., a 5% discount for bills paid early, or a good customer discount such as a discount on the seventh month's bill after six months of paying on time).
- Communicate financial viability information to stakeholders to keep them informed about rates.

Measures that you might consider for tracking accomplishments in Financial Viability:

- **Revenue to expenditures ratio:** $\frac{Total\ annual\ revenue}{Total\ annual\ expenditures}$
- **Debt ratio:** $\frac{Total\ liabilities}{Total\ assets}$
- **Number of late or unpaid bills per billing period**
- **Number of annual shutoffs**

INFRASTRUCTURE STABILITY

Challenges related to **Infrastructure Stability** include:

- Planning for repair and maintenance of infrastructure is hampered by a limited knowledge of the condition of existing infrastructure components.
- Many systems are trapped in a reactive repair and maintenance mode leaving little or no time for undertaking the proactive work needed to establish an asset management program.

Try This:

Create an inventory of your assets over time by setting up a template for logging assets. Log assets at the time that regular maintenance is performed.

Examples of actions taken by high performing utilities in **Infrastructure Stability** include:

- Create a complete and organized inventory of its current system components, condition, location, age, life expectancy, and cost.
- Conduct inflow and infiltration (I&I) and water loss analyses to determine the revenue and cost implications of deteriorating pipe conditions.
- As major collection system replacements are needed, consider sewer (sanitary and stormwater) separation to improve treatment performance and preserve treatment capacity.
- Track the status of all system components to be better aware of where weaknesses exist and when maintenance may be required (e.g., plotting valves, hydrants, and main breaks on a map).
- Coordinate asset repair, rehabilitation, and replacement with other community projects and repairs (e.g., road maintenance) to minimize disruptions and other negative consequences. Communicate these repairs in advance with customers in case of service disruptions.
- Track the frequency and cause of repeat collection, distribution, and maintenance problems.
- Establish a capital improvement plan that identifies capital projects and equipment purchases, as well as the resources needed to fund them.
- Have an understanding of system operating parameters (e.g., pressure).
- Organize all system documentation in a manner that it can be easily accessed by multiple staff members in the case of a break-down or other event.
- Focus on small annual projects and system upgrades rather than major undertakings.

Measures that you might consider for tracking accomplishments in Infrastructure Stability:

- **Inventory completeness rate:** $\frac{\textit{Total number of critical assets inventoried}}{\textit{Total number of critical assets owned and operated}}$
- **Condition assessment rate:**

$$\frac{\textit{Number of assets with condition assessed and put into condition categories}}{\textit{Total number of assets}}$$

OPERATIONAL RESILIENCY

> **Try This:**
>
> Use an annual board meeting as an opportunity to distribute and review key emergency documents.

Challenges related to **Operational Resiliency** include:

- A lack of system documentation.
- Insufficient time to conduct training and exercises on the emergency response plan.
- Employee and board member turnover makes it difficult to maintain familiarity with emergency response procedures and materials.

Examples of actions taken by high performing utilities in **Operational Resiliency** include:

- Conduct an all hazards vulnerability assessment.
- Prepare an all hazards emergency response plan, including all associated documents (e.g., shut off checklists, notices, and contact information), and conduct training and exercises on the plan. In this plan, make sure to indicate who is responsible for each activity.
- Distribute all emergency documents to board members and other essential personnel, including local emergency responders.
- Participate in your state's Wastewater Agency Response Network (WARN) program to share resources with neighboring utilities during an emergency through mutual aid and assistance.
- Develop relationships with contractors to ensure the types of equipment and services needed during emergencies are available in a timely fashion.
- Have safety policies in place to protect employees against work-related injuries.
- Identify and establish risk communication roles and responsibilities.
- Coordinate emergency response plans with local response partners, including emergency management agencies, police, fire, and critical independent sectors (e.g., hospitals and power companies).
- Identify a state certified laboratory that can help with emergency water testing during an incident.
- Plan for recovery by identifying funding resources that may be available to restore and strengthen the resiliency of your system.
- Identify opportunities to mitigate and adapt to climate change.

Measures that you might consider for tracking accomplishments in Operational Resiliency:

- **Annual number of work-related injuries**
- **Annual number of emergency response trainings or exercises held**
- **Period of time (hours or days) that minimum daily demand can be met with the primary water source unavailable**

STAKEHOLDER UNDERSTANDING & SUPPORT

Challenges related to **Stakeholder Understanding & Support** include:

- Customers and stakeholders display a lack of interest in gaining a better understanding of utility needs.
- Customer resistance to paying water bills or supporting rate increases.

Try This:

Host an open house or annual barbeque at your facility for stakeholders and community members. Offer tours of the facility to citizens and local media as a part of this event.

Examples of actions taken by high performing utilities in **Stakeholder Understanding and Support** include:

- Perform active customer and stakeholder outreach and education (e.g., hold meetings with stakeholders at the facility to convey a basic understanding and knowledge of utility operations).
- Utilize engagement and outreach activities as opportunities to also better understand community and customer needs and interests related to utility operations.
- Promote the value of clean and safe water (e.g., utilize pre-prepared National Rural Water Association education materials associated with its Quality on Tap program).
- Actively engage with local decision makers, watershed, and regulatory representatives through newsletters, regular meetings, and surveys.
- Have a capital improvement plan or other document to share with stakeholders that summarizes utility priorities. Make this information easily available.
- Establish active level of service goals to set performance measures for the utility and share with customers.
- Use space in bills to provide important information to customers.
- Share positive information on your utility with local media sources as a way of establishing a positive working relationship.

Measures that you might consider for tracking accomplishments in Stakeholder Understanding & Support:

- **Annual number of stakeholder outreach activities conducted**
- **Amount of annual positive media coverage (number of media stories per year)**
- **Rate of responsiveness to stakeholder suggestions/complaints:**

$$\frac{\textit{Number of stakeholder suggestions or complaints responded to}}{\textit{Total number of stakholder suggestions or complaints}}$$

Developing and Implementing a System Management Improvement Plan

CREATING A PLAN

Having gained a more complete understanding of strengths and challenges based on the self-assessment and an idea of what actions can strengthen performance in the management areas, a system will be better equipped to develop an effective utility management improvement plan. It is often useful for a "champion" to be assigned to be in charge of overseeing the development of an improvement plan (or parts of the plan), but various staff members and managers should be involved in its creation, if possible. In drafting a plan, the utility should create specific tasks and tactics for addressing its targeted improvement areas, and identify management adjustments necessary to make the desired changes.

Upon completion of the self assessment exercise, the system will choose priority improvement areas based on the results, choosing areas in the red and yellow boxes of the plotting exercise first. The utility management improvement plan should be **simple, specific, realistic, and complete.** For each improvement action, the following components should be included in the plan:

- An easy-to-understand, but still thorough, **description** of what actions will be taken;
- Identification of **who will be responsible** for taking the action;
- Known **resources** already on-hand or needed to successfully complete the actions (financial, informational, or other);
- Identification of key **challenges** that will need to be addressed;
- A **timeline** with key milestones for the actions in the plan, and a date by when the plan will be completed (or acknowledgement if it is ongoing); and
- A **review loop** to periodically assess progress in implementing the plan and adapting the plan to changing conditions (e.g., implementing a new billing system, measuring the efficiency of the system as implemented, and refining the system based on the information from the performance measures).

The utility can create its own improvement plan format based on its unique needs and circumstances, or use the System Management Improvement Plan Worksheet that is provided in Appendix II.

The System Management Improvement Plan Worksheet

Instructions:

1. *List your top three priority management areas – these should be drawn from the self assessment activity.*
2. *List the improvement actions that you will undertake to address the priority management areas – you should have at least one action for each priority management area (actions may address multiple management areas).*
3. *Fill out the details in the table below for each improvement action separately (i.e., one table per action).*

EXAMPLE SYSTEM MANAGEMENT IMPROVEMENT PLAN WORKSHEET

Priority Management Areas:

1. Water Resource Adequacy
2. Product Quality
3. Financial Viability

Improvement Action:	Improve practices for reducing the number of outstanding bills
Description: ✓ Action ✓ Management Area(s) addressed ✓ Objective(s)	✓ Limit the carry-forward balance to a fixed amount and increase service deposits to discourage customers who move frequently or avoid paying their bills. ✓ Financial Viability ✓ Reduce the amount of money lost to unpaid bills
Timeline: ✓ Start date ✓ Milestones ✓ Target completion date	✓ June 2013: Start –Draft new carry-forward balance allowance and new service deposit requirements for new customers ✓ July 2013: Propose and approve new balance and deposit requirements at board meeting August 2013: Notify customers of new requirements ✓ September 2013: Completion – Implement new balance and deposit requirements
Responsible Party (or Parties):	✓ Bill Smith ✓ Jane Anderson
Relevant Resources (on-hand or needed):	✓ Example ordinance text created by other utilities to support the desired policy change
Challenges to Address:	✓ Public pressure on board members to reject rate increases
Review Process: ✓ Performance indicators or measures ✓ Status reports and updates frequency/cycle	✓ Milestone dates met ✓ Weekly progress checks with utility director relative to identified milestones
Other Notes:	✓ Conduct calls with each board member to explain the need for the policy change and answer their questions

YOUR TURN: Complete the Improvement Plan Worksheet in Appendix II.

MEASURING PROGRESS

As a part of the review loop built into an action plan, the system must determine how to track progress toward achievement of performance goals. For rural and small systems, it is most feasible to measure internal performance, rather than trying to gather external data needed for more complex evaluations. Some measurements to consider are included in the "How to Succeed in Each Area" section of the *Guidebook*, beginning on page 11, but it is important to remember that performance measures should be tailored to the specific needs and goals of each system.

Some points to keep in mind when selecting performance measures are included below:

- Select the **right number, level, and type of measures** for the utility's capabilities and capacity. (As a general rule, having a short list of measures is probably best)
- Measuring performance will require some level of **resource commitment**. (Resources can include money, time, and personnel)
- Develop **clear and consistent definitions** for each measure. (How will it be tracked and reported?)
- Set **reasonable targets** based on criteria such as performance and improvement in previous years, or customer expectations. (How quickly does the community expect projects to be completed?)
- Develop a process for **evaluating and responding to the results** of measuring progress. (Now that the utility knows how it is doing, how will it use this information to continue to improve its performance?)
- Select measures that support the system's **short-term and long-term goals**. (How do these measurements fit into the "big picture" of the utility?)
- Periodically report on progress to the board and other key stakeholders in the community.
- **Recognize and celebrate** progress along the way! (Every little bit counts)

ASSESSING ACCOMPLISHMENTS AND MAKING IMPROVEMENTS

Having created a system for measuring progress toward meeting improvement goals, a system will need to complete the third step in the review loop: assessing accomplishments (or pitfalls) and making adjustments as needed. Setting aside time on a quarterly, biannual, or annual basis to discuss the progress that has been made towards key management goals is one of the simplest, but most important, actions that a system can take. By addressing the key questions and modifying the improvement plan on a regular basis, a system will keep the goals, and itself, up-to-date on current issues and on the path to being a more resilient, sustainable system.

QUESTIONS TO CONSIDER:

What is working? Why?

What is not working? Why?

Have internal or external conditions for my utility changed?

How can my plan be adjusted accordingly?

APPENDICES

APPENDIX I: SELF ASSESSMENT WORKSHEET

STEP 1 – RATING ACHIEVEMENT AREAS

Assess your system by rating your current level of achievement for each management area. Consider how effectively your current management efforts support each of the areas, and note that each management area has several dimensions (represented by the bullet points listed for each). Your rating should reflect the dimension with the lowest level of achievement.

Scale from low achievement to high achievement:

- Select **Low** if your system has no workable practices in place for addressing this area – very low capacity and performance.
- Select **Medium** if your system has some workable practices in place with moderate achievement, but could improve – some capacity in place.
- Select **High** if your system has effective, standardized, and accepted practices in place. It either usually or consistently achieves goals – capacity is high and in need of very little or no further development.

STEP 2 - RANKING PRIORITY AREAS

Rank the importance of each management area to your system. Base this ranking on your goals and the specific needs of your community. Your ranking may be influenced by current or expected challenges (e.g., if your community is experiencing elevated population growth rates, Water Resource Adequacy may be ranked as a high priority area to address). Again, note that each management area has multiple dimensions (represented by the bullet points listed) – your ranking should represent the highest priority of all of the points listed, and should be ranked independently of the achievement level (i.e., an area can remain, and therefore be ranked, as a high priority even if the utility is already undertaking needed improvement efforts).

Scale from low priority to high priority, keeping in mind the following:

- Current or expected challenges
- Customer or stakeholder impact (reliability, quality, timeliness)
- Consequences of not improving (non-compliance, increased cost, lost credibility, impacts to health and safety)
- Urgency (near or long term needs)
- Community priorities

TABLE A

Key Management Area	Management Area Description	Step 1: Rate Achievement (Low – High)	Step 2: Rank Priority (Low – High)
1. Water Resource Adequacy **(e.g., water quantity)**	• My system is able to meet the water or sanitation needs of its customers now and for the reasonable future. • My utility or community has performed a long-term water supply and demand analysis. (Applies to drinking water systems only.) • My system understands its relationship to local water availability. (Drinking water utilities should focus on utilization rates relative to any local water stress conditions, wastewater utilities should focus on return flows.)		
2. Product Quality **(e.g., clean & safe water)**	• My system is in compliance with permit requirements and other regulatory or reliability requirements. • My utility meets local community expectations for the potable water and/or treated effluent and process residuals that it produces.		
3. Customer Satisfaction	• Customers are satisfied with the services the system provides. • My system has procedures in place to receive and respond to customer feedback in a timely fashion.		
4. Community Sustainability & Economic Development	• My utility is aware of and participating in local and regional community and economic development planning activities. • My utility's goals also help to support overall watershed and source water protection, and community economic goals.		
5. Employee & Leadership Development	• Training programs are in place to retain and improve institutional knowledge. • Opportunities exist for employee skills development and career enhancement. • Job descriptions, performance expectations, and codes of conduct are established.		
6. Financial Viability	• The rates that my utility charges are adequate to pay our bills, put some funds away for the future, and maintain, repair, and replace our equipment and infrastructure as needed. (O&M, debt servicing, and other costs are covered.) • My utility discusses rate requirements with our customers, board members, and other key stakeholders.		
7. Operational Optimization **(e.g., energy/water efficiency)**	• My utility has assessed its current energy usage and performed an energy audit. • My utility has maximized resource use and resource loss (e.g., water loss, treatment chemical use). • My utility understands, has documented, and monitors key operational aspects of the system (e.g., pressure, flow, quality).		
8. Infrastructure Stability **(e.g., asset management)**	• My utility has inventoried its current system components, condition, and cost. • My system has a plan in place for repair and replacement of system components.		
9. Operational Resiliency	• My utility has conducted an all hazards vulnerability assessment (safety, natural disasters, environmental risks, etc.). • My utility has prepared an all hazards emergency response plan.		
10. Stakeholder Understanding & Support	• My system actively engages with local decision makers, community, watershed (where relevant), and regulatory representatives to build support for its goals, resources, and the value of the services it provides. • My utility performs active customer and stakeholder outreach and education to understand concerns and promote the value of clean and safe water.		

STEP 3 - PLOT RESULTS

To compare your results for each management area, you will plot each pair (rating, ranking) in the grid below. For each management area, identify your high/medium/low rating in the green Step 1 box, and find the corresponding row in the table. Then, for the same management area, identify your high/medium/low ranking in the blue Step 2 box, and find the corresponding column in the table. The box where the row and column intersect is where you should place that management area (note the abbreviations below for use in the self assessment plot).

WA	Water Resource Adequacy	FV	Financial Viability
PQ	Product Quality	OO	Operational Optimization
CS	Customer Satisfaction	IS	Infrastructure Stability
CE	Community Sustainability & Economic Development	OR	Operational Resiliency
ED	Employee & Leadership Development	SS	Stakeholder Understanding & Support

TABLE B

Rating (Achievement)	**High**			
	Medium			
	Low			
		Low	**Medium**	**High**
		Ranking (Priority)		

STEP 4 - ANALYZE RESULTS

Examining the results of the plotting exercise in Step 3 can help identify management areas on which to focus improvement efforts. Management areas that fall into the **red box** are both very important and under-developed, meaning that they should be seen as a top priority for improvement. Management areas that land in the **yellow boxes** should be next on the list for improvement efforts, and those that fall into the **white boxes** are important to consider for long-term improvement efforts, but likely do not need to be prioritized for immediate action. The eventual goal for all systems should be high achievement in each of the management areas.

QUESTIONS TO CONSIDER:

Where is my utility strong?

Where is there the most room for improvement?

What should my areas of focus be?

Why are these areas priorities?

APPENDIX II: SYSTEM MANAGEMENT IMPROVEMENT PLAN WORKSHEET

Instructions:

- ✓ *List your top three priority management areas – these should be drawn from the self assessment activity.*
- ✓ *List the improvement actions that you will undertake to address the priority management areas – you should have at least one action for each priority management area (actions may address multiple management areas).*
- ✓ *Fill out the details in the table below for each improvement action separately (i.e., one table per action).*

Priority Management Areas:

1.
2.
3.

Improvement Action:
Description: ✓ Action ✓ Management Area(s) addressed ✓ Objective(s)
Timeline: ✓ Start date ✓ Milestones ✓ Target completion date
Responsible Party (or Parties):
Relevant Resources (on-hand or needed):
Challenges to Address:
Review Process: ✓ Performance indicators or measures ✓ Status reports and updates frequency/cycle
Other Notes:

APPENDIX III: RESOURCES FOR RURAL AND SMALL SYSTEMS

As a companion resource to this *Guidebook*, this list of resources offers additional information and guidance specific to small systems on the ten key management areas. Resources are identified in the table by the key management areas that they address (abbreviations in the table are identified in the key below). The majority of the resources listed are available free of charge.

WA	**Water Resource Adequacy**	**FV**	**Financial Viability**
PQ	**Product Quality**	**OO**	**Operational Optimization**
CS	**Customer Satisfaction**	**IS**	**Infrastructure Stability**
CE	**Community Sustainability & Economic Development**	**OR**	**Operational Resiliency**
ED	**Employee & Leadership Development**	**SS**	**Stakeholder Understanding & Support**

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
A Drop of Knowledge The Non-operator's Guide to Drinking Water Systems http://www.rcap.org/sites/default/files/rcap-files/publications/RCAP-Non-operator%27s%20Guide%20to%20DRINKING%20WATER%20Systems.pdf *Explains in simple, everyday language the technical aspects of drinking water utilities from source to tap. Helpful as an orientation and background guide for new small utility board members and small community decision makers.*										✓
ArcGIS for Water Utilities http://resources.arcgis.com/content/water-utilities *An industry specific configuration of ArcGIS designed to meet common needs of water, wastewater and stormwater utilities and is delivered as module of ArcGIS for Local Government. ArcGIS for Water Utilities is a free download that you can deploy on top of either the entire ArcGIS System or the individual components of the ArcGIS System that your organization licenses.*								✓		
ArcGIS for Water Utilities – Infrastructure Operations Dashboard Template http://www.arcgis.com/home/item.html?id=00109211bfba4a89a82b512a78f3b9f5 *Provides a high-level view into the health and operations of public infrastructure. Also provides relevant base maps and operational layers from several sources, and provides a series of information pop-ups and reports so concise map-centric content can be visualized and used to support the day to day operations of a water utility or public works agency.*							✓			

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
ARRA Registering and Reporting Guide for Water/Wastewater Systems with Loans/Grants from the U.S. Department of Agriculture-Rural Utilities Service http://www.rcap.org/sites/default/files/rcap-files/publications/RCAP%20ARRA%20Registering%20and%20Reporting%20Guide.pdf *Walks communities that received loans of American Recovery and Reinvestment Act (ARRA) funds through USDA Rural Utilities Service (RUS) (for water and wastewater projects) through the special reporting processes that must be followed for ARRA funds.*						✓				
Arsenic and Radionuclides: Small Water System Treatment Experience http://watercenter.montana.edu/training/arads/default.htm *Consists of four 10-minute video presentations and auxiliary resource files to help small-water-system personnel understand the requirements and challenges of treating their source water for arsenic or radionuclides from the perspective of their peers who operate treatment facilities.*		✓								
Assessing The Impact Of Current And Future TMDL Designations On Small Wastewater Systems http://www.nrwa.org/benefits/whitepapers/2010_Update/kramer%20TMDL%20impact%20assessment%20final.doc.pdf *The impact of a TMDL on a given water body can result in much more stringent permit limits for a wastewater treatment plant discharging to that water body. A significant financial impact can befall a community if the community's current wastewater treatment plant is unable to meet the new limits and a new plant or substantial upgrades are required. This paper is an attempt to quantify the impacts of the TMDL program on small communities.*		✓								
Asset Management: A Handbook for Small Water Systems http://epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_asset_mgmnt.pdf *Presents basic concepts of asset management and provides the tools to develop an asset management plan. It is designed for owners and operators of small community water systems (CWSs). CWSs include all systems (both publicly and privately owned) with at least 25 year-round residential customers or 15 year-round service connections.*						✓	✓	✓		
Asset Management Guide for Wastewater Utilities Including Total Electronic Asset Management System (TEAMS) Software http://www.mcet.org/am/am%20toolkit.html *Modules on the principles of asset management, as well as Train the Trainer materials to multiply this information.*							✓	✓		
AWWA Water Audit Software http://www.awwa.org/resources-tools/water-knowledge/water-loss-control.aspx *Free software to compile a preliminary audit.*										

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
The Basics of Financial Management for Small-community Utilities http://www.rcap.org/finmgmtguide *A basic guide that is ideal for a board member of a drinking water or wastewater utility who needs to understand the financial aspects of a utility's operations.*					✓	✓				
The Big Guide for Small Systems: A Resource for Board Members http://www.rcap.org/boardguide *A comprehensive desk reference that is ideal as an orientation and background for new members on a utility's board of directors. Designed for members of the board of a drinking water and/or wastewater system in a small community. In various parts of the guide, sample documents are provided that utilities can take and adapt for use in their own situations.*			✓		✓					✓
Board Member Training http://msucares.com/water/waterboard/waterindex.html *Trains board members in the areas of laws and regulations, duties and responsibilities, ethics, operation and maintenance, management and finance, rate setting, and public relations and customer service.*										✓
Capital Improvement Plan (CIP) Tool for Water and Wastewater Utilities http://www.efc.unc.edu/tools.htm#CIPTool *CIP tool with example data and tools to create easy-to-understand predictions on: financial reserves, rate increases, and capital investment.*								✓		
Care and Conserve Sewer Line Repairs http://www.atlantawatershed.org/bureaus/waste/Sewer_Care%20&%20Conserve%20Web.pdf *Sample program for low income assistance.*						✓				
Check Up Program for Small Systems http://epa.gov/safewater/cupss/ *Provides a simple, comprehensive approach based on EPA's highly successful Simple Tools for Effective Performance (STEP) Guide series. Use CUPSS to help you develop: a record of your assets, a schedule of required tasks, an understanding of your financial situation, and a tailored asset management plan.*						✓	✓	✓		
Circuit Rider Program http://www.nrwa.org/state%20associations/map.aspx *Provides technical assistance for the operations of rural water systems. Rural Utilities Service through contracting, has assisted rural water systems with day-to-day operational, financial, and management problems. The assistance may be requested by officials of rural water systems or RUS. The program compliments the loan supervision responsibilities for RUS. The National Rural Water Association has entered into a contract with RUS to provide this service. National Rural Water Association - State Affiliates do the work in their states.*					✓	✓		✓	✓	
Control and Mitigation of Drinking Water Losses in Distribution Systems http://water.epa.gov/type/drink/pws/smallsystems/upload/Water_Loss_Control_508_FINALDEc.pdf	✓	✓		✓			✓	✓	✓	

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
Information on establishing water loss control programs.										
Drinking Water Security for Small Systems Serving 3,300 or Fewer Persons **http://water.epa.gov/infrastructure/watersecurity/upload/2005_12_12_smallsystems_very_small_systems_guide.pdf** *Presents basic information and steps you can take to improve security and emergency preparedness at your water system.*									✓	
EFC Financial Dashboard **http://efc.boisestate.edu/efc/Tools/Dashboard/tabid/154/Default.aspx** *Allows users to use CUPSS data for strategic purposes (login).*						✓	✓	✓		
eLearning – Leadership & Management Courses **http://apps.awwa.org/ebusmain/Elearning/Courses.aspx?Category=ELMGMTLEADERSHIP** *AWWA's online courses on leadership and management.*					✓					
eLearning – "Water Basics for Decision Makers" **http://www.awwa.org/Conferences/learning.cfm?ItemNumber=56775&navItemNumber=56779** *Series for new decision makers in water or wastewater utilities, or for those who regularly interact with professionals but don't clearly understand how water is distributed and treated.*										✓
Energy Audit Webcast **http://www.rcap.org/energyauditswebinar** *The Association of State Drinking Water Administrators (ASDWA) and RCAP partnered to host an energy audit webinar for state drinking water program staff. The webinar covers a "how-to" plan for conducting energy audits for small water utilities and outlined a national training effort to bring an energy audit approach to all RCAP offices including undertaking a pilot initiative involving selected small water systems.*							✓			
ENERGY STAR for Wastewater Plants and Drinking Water Systems and Portfolio Manager Tool **http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager** *An interactive energy management tool that allows you to track and assess energy and water consumption across your entire portfolio of buildings in a secure online environment.*							✓			
Energy Use Assessment Tool for Water and Wastewater Systems (includes User Guide, Tool and Example) **http://water.epa.gov/infrastructure/sustain/energy_use.cfm** *An Excel-based tool to help small and medium sized water and wastewater utilities assess their current energy usage and help identify possible ways to use energy more efficiently.*				✓			✓	✓		
Financial Management Courses						✓				

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
http://www.newwa.org/NetCode/courseDescList.aspx *Search under course category "Management."*										
Financial Planning: A Guide for Water and Wastewater Systems http://www.nmenv.state.nm.us/dwb/Documents/Public%20Info/RCAC%20Financial%20guide_final_6.pdf *Guidebook that walks a utility through the annual budgeting process, the rate setting process, and creating a 6-year financial plan.*						✓				
Formulate Great Rates: The Guide to Conducting a Rate Study for a Water System http://www.rcap.org/rateguide *A guide to developing a fair and equitable rate structure in a small drinking water or wastewater system.*		✓	✓			✓				
Getting in Step: A Guide for Conducting Watershed Outreach Campaigns http://water.epa.gov/type/watersheds/outreach/upload/gettinginstepedition3.pdf http://water.epa.gov/type/watersheds/outreach/index.cfm *Provides some of the tools needed to develop and implement an effective watershed outreach plan. For a watershed practitioner trained in the sciences, this manual will help you address public perceptions, promote management activities, and inform or motivate stakeholders.*										✓
Getting Your Project to Flow Smoothly: A Guide to Developing Water and Wastewater Infrastructure http://www.rcap.org/sites/default/files/rcap-files/publications/RCAP%20Getting%20Your%20Project%20to%20Flow%20Smoothly.PDF *A comprehensive guide on all the steps a project owner (governing body of a utility) should go through in planning, designing and constructing infrastructure.*	✓			✓		✓	✓	✓		✓
The Homeland Security Exercise and Evaluation Program (HSEEP) Toolkit https://hseep.dhs.gov/pages/1001_Toolk.aspx *The HSEEP Toolkit is an interactive, on-line system for exercise scheduling, design, development, conduct, evaluation and improvement planning. The HSEEP Toolkit is not a system, but rather a collection of systems and tools.*									✓	
Local Safe Disposal Programs: Ex. Safe Medicine Disposal for Maine http://www.safemeddisposal.com/ *The Safe Medicine Disposal for ME program provides Maine's residents with a safe disposal option for unused and unwanted medicine. Free medicine mail-back envelopes are available at participating sites.*										✓
National Cost Estimate for Cross Connection Control in Small Water Systems http://www.nrwa.org/benefits/whitepapers/risks/risks03/risk03/risk03.pdf *A national regulation for cross connection control will impact the 49,497 Community Water Systems (CWS) and 19,668 Non transient and Noncommunity Water Systems (NTNCWS) in the U.S. that serve 10,000 or fewer persons (USEPA 2003). This report presents a methodology to estimate the national cost for a cross connection control program for these water systems.*		✓						✓	✓	

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
National Rural Water Association Job Network **http://www.nrwa.org/benefits/jobtarget.aspx** *Helps to connect the most skilled professionals in the fields of drinking water, wastewater, source water protection, utility management & engineering to potential employers.*										
National Rural Water Association Technical Training and Assistance Program **http://www.nrwa.org/state%20associations/map.aspx** *Click on your state for contact information to obtain services under the Technical Assistance and Training Program. National Rural Water Association provides training and on-site technical assistance to waste water systems in the contiguous 48 states, Alaska, Puerto Rico, and Hawaii. The training is provided to help reduce exposure to waste related health and safety hazards and enhance the sustainability of wastewater systems in rural and small communities.*		✓					✓			
National Rural Water Association Website **www.nrwa.org** *Website of the National Rural Water Association, the largest water and waste water utility membership association.*										
Only Tap Water Delivers Campaign **http://www.awwa.org/Government/Content.cfm?ItemNumber=3846&navItemNumber=3847** *A public outreach campaign that is available to AWWA utility members free of charge. The materials are available in a CD toolkit, and can be adapted to meet local needs.*										✓
Pipe Repair Checklist **http://www.awwa.org/Resources/SmallSystem.cfm?ItemNumber=3640&navItemNumber=32930** *AWWA small systems pipe repair checklist.*							✓			
Preventive Maintenance Card File for Small Public Water Systems Using Ground Water **http://www.epa.gov/ogwdw/smallsystems/pdfs/booket_smallsystems_preventmaint.pdf** *Schedules for maintenance tasks and checklists and logs for easily recording your findings.*							✓			
Protecting Your Community's Assets: A Guide for Small Wastewater Systems **http://www.nesc.wvu.edu/subpages/WW_manage_plan.cfm** *Helps utility managers, operators, and local officials improve security and plan for emergency situations affecting wastewater treatment systems.*		✓						✓	✓	
Public Communications Toolkit **http://www.awwa.org/Government/Content.cfm?ItemNumber=3851&navItemNumber=3852** *Website with and online toolkit of various resources for water professionals related to public communication.*										✓

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
Public Education and Outreach on Stormwater Impacts http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=1 *EPA's website for local officials and communities to conduct education and outreach about stormwater, what it is, who contributes to it, and best practices related to stormwater.*										✓
Quality On Tap! Publication http://www.nrwa.org/benefits/QOT.aspx *A nationwide, grassroots public relations and awareness campaign designed especially for the drinking water industry. Quality On Tap is the first practical "hands-on" guide to better public relations for small water utilities. It contains the tools small water systems need to do the most important job of all - spreading the truth to the public of the quality of work they do and the quality water they produce.*										✓
Record Keeping Rules: A Quick Reference Guide http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsystems_records_08-25-06.pdf *A rule-by-rule summary of requirements for keeping monitoring, public notice, and other records, as well as helpful tips on record maintenance and security.*		✓					✓			
Recruiting and Training Veterans Brochure: For Careers in the Water Sector http://www.workforwater.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147483686 *The Department of Veterans Affairs and Department of Labor administer programs to assist Veterans in their transition to civilian careers and oversee funding to pay for education and job training. The Environmental Protection Agency, American Water Works Association and Water Environment Federation are working with these agencies to promote water sector careers nationally.*					✓					
Restructuring and Consolidation of Small Drinking Water Systems http://www.epa.gov/safewater/smallsystems/pdfs/compendeum_smallsystems_restruct.pdf *Contains information on restructuring and consolidation authorities for public drinking water systems. It provides an individual summary for each state by listing available statutes, regulations, or policies that encourage or require consolidation or restructuring of drinking water systems.*		✓	✓	✓		✓	✓	✓	✓	
Revolving Loan Fund Program http://www.nrwa.org/benefits/revolvingloan.aspx *The NRWA Revolving Loan Fund was established under a grant from USDA/RUS to provide financing to eligible utilities for pre-development costs associated with proposed water and wastewater projects. RLF funds can also be used with existing water/wastewater systems and the short term costs incurred for replacement equipment, small scale extension of services or other small capital projects that are not a part of your regular operations and maintenance.*						✓				

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
Rural Community Assistance Partnership Website www.rcap.org *Aims to provide technical assistance and training services to rural communities develop and sustain critical infrastructure and promote economic opportunity.*										
Rural Water Supply and Sewer Systems: Background Information http://www.nationalaglawcenter.org/assets/crs/98-64.pdf *CRS report for congress.*										
Saving Water and Energy in Small Water System http://watercenter.montana.edu/training/savingwater/default.htm *A training program that consists of four 45-minute presentations and associated resource files. The presentations are meant for use in classroom or workshop settings. The four modules address the following topics: water conservation, energy management, alternative energy, and water accounting (audit and leak detection).*	✓			✓			✓			
Security and Emergency Management System (SEMS) http://semstechnologies.com/RAMCAP.asp *Software to assist small water systems in completing a vulnerability self-assessment.*								✓	✓	
Security and Emergency Response Planning Toolbox for Small Water and Wastewater Systems http://www.rcap.org/toolbox *Consists of five core modules, appendices, and introductory text that relate security and emergency preparedness to best practices of system operation and management.*								✓	✓	
Setting Small Drinking Water Rates for a Sustainable Future http://www.epa.gov/owm/waterinfrastructure/pdfs/final_ratesetting_guide.pdf *A step-by-step rate setting guide for small utilities for assessing annual costs, revenue needs, and reserve requirements and setting appropriate rates.*						✓				✓
Simultaneous Compliance Tool http://www.simultaneouscompliancetool.org/SCToolSmall/jsp/modules/welcome/welcome.jsp *Assists in making appropriate choices to comply with various water quality goals emanating from water quality regulations.*		✓								
Small Drinking Water Systems Handbook A Guide to "Packaged" Filtration and Disinfection Technologies with Remote Monitoring and Control Tools http://www.epa.gov/nrmrl/pubs/600r03041/600r03041.pdf *Provides information to the small system operator, manager, and/or owner about different approaches to providing safe and affordable drinking water to your community.*		✓						✓		
Small System Electric Power Use - Opportunities For Savings www.nrwa.org/benefits/whitepapers/risks/2008papers/regnier%20SMALL%20SYSTEM%20ELECTRIC%20POWER%20USE%206.doc *Describes the typical rate structures utilized by U.S. Electric utilities and how these rate structures can most effectively be utilized by water utilities, especially small*							✓			

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
ones, to minimize their electric costs and thereby save money and energy.										
Small System Guide to Safe Drinking Water Act Regulations http://epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_sdwa.pdf *A resource for understanding current and anticipated drinking water regulations with which utilities need to comply.*		✓								
Small Utilities Rates and Finances Spreadsheet (and Instructions) http://www.awwa.org/Resources/SmallSystem.cfm?ItemNumber=3640&navItemNumber=32930 *A self-guided, interactive financial spreadsheet application designed to assist small systems.*						✓				
Small Utility Board Training http://watercenter.montana.edu/training/board_training/default.htm *A training course designed to help water board members and elected officials understand the basic principles of public water system regulation, operation, planning, budgeting and communication.*					✓					✓
Small Water Systems: A Vital Component of WARN http://www.epa.gov/mutualaid or www.nationalwarn.org *Describes how small systems can participate in WARN to share resources with neighboring utilities during an emergency.*									✓	
Strategic Planning: A Handbook for Small Water Systems, Simple Tools for Environmental Protection (STEP) Guide http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsystems_stratplan.pdf *Presents basic concepts on strategic planning for small water systems and explains how this process can help improve your technical, managerial, and financial capabilities. It provides background information on the process of strategic planning and a series of worksheets to use in developing a written strategic plan.*				✓		✓	✓	✓	✓	
Stakeholder Analysis http://www.sswm.info/category/planning-process-tools/exploring#StakeholderAnalysis *A portion of the Sustainable Sanitation and Water Management online Toolbox.*										✓
Survival Guide: Public Communications for Water Professionals www.wef.org/WorkArea/DownloadAsset.aspx?id=7120 *A guidebook to help utilities learn how to communicate effectively with their community and customers. It provides an overview focused on the learning the basics of public communication and different public communication scenarios.*										✓
Sustainable Infrastructure for Small System Public Services: A Planning and Resource Guide http://www.rcap.org/sites/default/files/rcap-files/publications/RCAP%20Sustainable%20Infrastructure%20Guide.PDF				✓		✓	✓	✓	✓	

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
Provides worksheets, examples, case studies and resources on water conservation, energy efficiency and renewable energy resources for small utilities.										
System Development Charge Calculator **http://efc.boisestate.edu/Tools/SDCCalculator/tabid/87/Default.aspx** *System development charges (SDCs), otherwise known as impact fees, are difficult for most small systems to determine. This calculator predicts the unit cost of adding new development to an existing water system. The calculator gives users the option of two methodologies when determining the cost impact of new connections.*						✓		✓		
Tabletop Exercise Tool for Water Systems **http://yosemite.epa.gov/ow/SReg.nsf/description/TTX_Tool** *A PC-based tool that contains materials to assist those interested in planning and facilitating tabletop exercises that focus on Water Sector-related issues. The updated TTX Tool contains fifteen scenarios that address an all-hazards approach to emergency preparedness and response, including natural hazards and manmade incidents, as well as introduces users to the potential impacts of climate change.*									✓	
Taking Stock of Your Water System: A Simple Asset Inventory for Very Small Drinking Water Systems **http://www.epa.gov/ogwdw/smallsystems/pdfs/final_asset_inventory_for_small_systems.pdf** *Helps very small water systems, such as manufactured home communities and homeowners' associations, assess their condition by preparing a simple asset inventory.*						✓		✓		
Talking to Your Decision Makers: A Best Practices Guide **http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsys_decision_makers_08-25-06.pdf** *Tips for working successfully with decision makers in your community to meet your water system's needs.*										✓
Talking to Your Customers About Chronic Contaminants in Drinking Water: A Best Practices Guide **http://water.epa.gov/drink/contaminants/upload/2007_11_02_contaminants_fs_contaiminants_chronic_talkingtocustomers.pdf** *Guidelines for effectively communicating with customers about the dangers of chronic contaminants and how water systems protect against contamination.*			✓	✓						✓
Technitrain Program **http://www.rcap.org/technitrain** *Helps to protect public health and foster economic development in targeted rural communities throughout the United States and its territories by providing onsite, community-specific technical assistance and training that: identifies and evaluates solutions to water and waste disposal problems, assists communities in preparing funding applications for their water and waste projects, and improves operation*				✓	✓	✓				

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
and maintenance of existing water and waste-disposal facilities. It is part of RCAP's overall mission of working with small, rural communities to increase local capacity.										
USDA Rural Utilities Service Borrower's Guide: A How-to for Water and Wastewater Loans from USDA Rural Development http://www.rcap.org/pubs/usdaborrguide *Summarizes the managerial and financial requirements for communities that are receiving U.S. Department of Agriculture Rural Utilities Services (RUS) loan funds for their water or wastewater utility.*						✓				
Utility Budgeting Worksheets http://efc.boisestate.edu/Tools/UtilityBudgetingwithUtilityBudgetingWorksheet/tabid/86/Default.aspx *Worksheets that assist operators, managers and board members in determining whether key criteria of financial viability are being met by a utility system and help determine if that system will have the financial capabilities necessary for the sustained provision of services for its customers.*						✓				
Valve Record Template http://www.awwa.org/Resources/SmallSystem.cfm?ItemNumber=3640&navItemNumber=32930 *Valve master record template spreadsheet.*							✓			
Vulnerability Self-Assessment Tool (VSAT) http://water.epa.gov/infrastructure/watersecurity/techtools/vsat.cfm *A risk assessment software tool that assists drinking water and wastewater utilities in assessing security threats and natural hazards and updating utility Emergency Response Plans; appropriate for any water system size or type.*								✓	✓	
Water and Environment Programs - Engineering Success Stories http://www.usda.gov/rus/water/ees/englib/success.htm *The information in these stories is provided by Rural Development, Water and Environmental Programs as a service to all those persons looking for alternative, innovative, or just plain successful approaches to rural water and waste problems.*							✓			
Water System Operator Roles and Responsibilities: A Best Practices Guide http://water.epa.gov/type/drink/pws/smallsystems/upload/2008_07_01_smallsystems_guide_smallsystems_operator_08-25-06.pdf *Helps to understand: (1) Roles and responsibilities in delivering safe drinking water to system's customers; (2) Additional responsibilities, which can vary depending on size, characteristics, managerial structure, and regulatory requirements.*		✓			✓				✓	
WaterPro Conference Website http://www.waterproconference.org/ *WaterPro is the annual conference of the National Rural Water Association. It takes place in even numbered calendar years. WaterPro is designed to bring together water and wastewater utility systems - large and small, municipal and rural - for*										

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
sessions in operations, management, boardsmanship and governance.										
WaterSense **http://www.epa.gov/WaterSense/** *EPA's program to promote water efficiency and conservation. Provides information for consumers to identify products and practices that save water. Utilities and local governments can partner with EPA to receive access to a network of partners working on water conservation and promoting the value of water and using it wisely.*			✓							✓
Water System Owner Roles and Responsibilities: A Best Practices Guide **http://www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsystems_owner_08-25-06.pdf** *A summary of system owners' key duties in protecting public health, overseeing system operation, and working with local officials.*					✓					✓
Water Quality in Small Community Distribution Systems **http://www.epa.gov/nrmrl/pubs/600r08039/600r08039.pdf** *Assists the operators and managers of small- and medium-sized public water systems. Provides a comprehensive picture of the impact of the water distribution system network on distributed water quality.*		✓						✓	✓	
Water University **http://www.wateruniversity.org/** *The intent of Water University and the National Rural Water Association is to provide the highest level of instruction, education, training and discussion to the largest audience possible. To meet that goal, most of the webinar/lecture portions of these courses are presented at low or no cost. In addition to providing information to the entire water industry, Water University provides a method for licensed water professionals to earn their necessary Continuing Education Units through our advanced on-line educated modules. Access to these modules requires enrollment fees, but these fees are still very affordable compared to in-person training.*										
Water & Wastewater Pricing **http://water.epa.gov/infrastructure/sustain/Water-and-Wastewater-Pricing-Introduction.cfm** *EPA Website on water and wastewater pricing, explaining the concept of pricing and water conservation, as well as supplying tools, guides, and reports on pricing.*						✓				
White Paper on Climate Change Impacts on Small and Rural Public Water Systems **http://www.nrwa.org/benefits/whitepapers/2010_Update/Climate%20white%20paper%20June%2022_2010%20-%20Final.pdf** *Presents a critical evaluation of the possible impacts of climate change on small and rural water systems and management/operational techniques or actions that may be affected as a result of these potential impacts.*	✓			✓					✓	

	WA	PQ	CS	CE	ED	FV	OO	IS	OR	SS
Work for Water Website **http://www.workforwater.org/** *Materials to encourage careers in the water sector, where opportunities to protect and preserve water resources are virtually unlimited and the chance to make a difference is unmatched.*					✓					

ACKNOWLEDGEMENTS

Steering Group

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City of Riceboro, Georgia

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RCAC – West Sacramento, California

John Holland
City of Clare, Michigan

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Watsonville, California

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This product was developed with assistance from Rob Greenwood, Morgan Hoenig, and Erin Krane-Peterfreund with Ross Strategic under Contract EP-C-11-009 with the Office of Wastewater Management at the U.S. Environmental Protection Agency.

Rural and Small Systems Guidebook to Sustainable Utility Management

October 2013

APPENDIX L

CDPH TECHNICAL, MANAGERIAL, FINANCIAL REPORT REQUIREMENTS

California Department of Public Health
Drinking Water Program

TMF Assessment Form

ASSESSMENT TYPE: ☐ **Funding Project** ☐ **New System** ☐ **Change of Ownership**

WATER SYSTEM CLASSIFICATION:
☐ **Community Water System**
☐ **Nontransient Noncommunity Water System**
☐ **Transient Noncommunity Water System**

WATER SYSTEM INFORMATION

Water System Name:
Water System Number:
Water System Physical Address:
County:
District Office or Local Primacy Agency:

PERSON COMPLETING THIS TMF ASSESSMENT

Name:	**Signature:**
Title :	**Date Submitted to CDPH:**
Phone Number:	**Email Address:**
Company Name and Address:	

MAIN WATER SYSTEM CONTACT PERSON INFORMATION

Name:	**Title:**
Phone Number:	**Email Address:**
Water System Mailing Address:	

TMF Assessment Instructions

In California the technical, managerial, and financial (TMF) assessment must be completed by public water systems that are applicants for California Department of Public Health (CDPH) funding programs, new water systems, and water system changes of ownership.

To complete this TMF assessment form refer to the guidance and explanations in the TMF Criteria document located on the CDPH web site at:

http://www.cdph.ca.gov/certlic/drinkingwater/Pages/TMFCommunityWaterSystems.aspx .

If requested system information has already been provided with the funding application submittal or been provided directly to the CDPH district office or the LPA, note the location of that information on the assessment form in the comments space. Update information as circumstances change. Required documentation may be submitted electronically on a compact disk (if submission is electronic indicate on assessment).

For each TMF element described below place the required information in the appendix and identify it by the attachment number that corresponds to the TMF element number. For example, the documentation required for element number seven, Water Rights, should be identified in the appendix as Attachment 7, Water Rights. In addition, in the comments section of each TMF element list the actual documents that are provided in the appendix. For example, under the Water Rights comments section of this TMF assessment indicate that in the appendix Attachment 7 copies of the deeds to Wells 1 and 2 and the State Water Resources Control Board surface water permit are provided.

Under each TMF element below check the boxes where applicable. If the item is not applicable (NA), indicate NA to show that these items have been considered.

TMF Elements

1. Consolidation Feasibility

[Funding Projects, New Systems, Change of Ownership - ***Mandatory***]

Each public water system applying for construction funding or a refinancing loan must perform an evaluation, including costs and feasibility, of physically consolidating with another public water system. Guidelines for when a consolidation is most feasible include, but are not limited to:

- when one of the water systems is located within another's established service area,
- when one of the water systems is within an existing General Plan's zone of influence of the other,
- Or when the water system is within five miles of another public water system.

If the water system applying for construction funding or a refinancing loan is a "small community water system" (which is defined as: a community water system that serves no more than 3,300 service connections or a yearlong population of no more than 10,000 persons) and the water system is considered "disadvantaged" (which is defined as: the entire

service of area of a community water system, or a community therein, in which the median household income is less than 80 percent of the statewide average), consolidation is *highly encouraged* and the water system may be allowed funding for a consolidation feasibility study and/or may be giving priority when seeking construction funding.

☐ List all large water systems and the number of connections that are within five miles of the system.
Record NA if there is no water system in the vicinity. ☐ NA

_____

_____

☐ Submit a consolidation assessment that includes the name of all water systems contacted, and the results of any consolidation discussions conducted with at least one system within the five mile radius. ☐ NA

Comments _____

_____

2. System Description

[Funding Projects - ***Necessary****;* New Systems and Change of Ownership - ***Mandatory***]

Provide a system map that illustrates the location of all of the components of the water system including the:

☐ Current service area boundary
☐ Sources ☐ NA
☐ Treatment facilities ☐ NA
☐ Pumping stations ☐ NA
☐ Pressure zones ☐ NA
☐ Storage tanks ☐ NA
☐ Potential contamination hazards ☐ NA
☐ Projected ten-year growth boundaries

Comments _____

_____

3. Certified Operators

[Funding Projects -***Necessary***; New Systems and Changes of Ownership- ***Mandatory***]

The regulating agency has determined that this water system needs a:
☐ Certified distribution operator, Grade _____ ☐ NA
☐ Certified treatment operator, Grade _____ ☐ NA

☐ Provide copies of current certificates with operator names and grades as documentation that the distribution and treatment operators are certified for the appropriate level that is required for the water system.

☐ For a contract certified operator, provide a copy of the contract that describes the: ☐ NA

- Level of certification that the operator will be required to maintain
- Specific duties for which the operator will be responsible
- Time to be spent serving the water system
- Procedures to follow for complaints, compliance discrepancies, and emergencies

Comments _____

_____

4. Source Capacity

[Funding Projects - ***Necessary***; New Systems and Changes of Ownership - ***Mandatory***]

At all times a water system must have the capacity to meet the system's maximum day demand and to ensure that it has suitably adequate sources of water supply to serve the needs of its constituents in the future. Develop and submit the following:

☐ Documentation which demonstrates that the water system has a sufficient water supply as described in California Code of Regulations, Section 64554.

☐ A water conservation plan to address potential drought conditions.

☐ A plan to install water meters on all connections as well as a master meter on each source in order to accurately measure water consumption. [Note that all water systems applying for CDPH funds must consider the feasibility of installing meters at each service connection that lacks a meter. Additionally, the funding requirements for the project must include conditions that the system will incorporate provisions into its operating procedures and expenses to read the meters and to charge rates based on usage.
☐ N/A – System is metered

☐ A map of the existing service area and surrounding locations that includes the location of all water sources as well as sources of potential contamination such as waste disposal sites, landfills, feedlots, underground storage tanks, out-of-service wells, and other potential contaminants.

☐ Documentation that demonstrates the water sources are protected from vandalism, tampering, contamination, or other threats.

☐ Ten year potential growth plans consistent with local land use plans and projected water demand. Describe how the system will ensure that potential water sources will meet all water quality standards.

☐ A plan to start the process to obtain additional water rights for new water sources if needed. ☐ NA

Comments _____

_____

5. Operations Plan

[Funding Projects-***Necessary***; New Systems and Changes of Ownership- ***Mandatory***]

An operations plan describes all of the activities needed to maintain the system in compliance with all standards. Operations plans need to be updated whenever changes occur. The date of the latest operations plan review was _____.

Provide an operations plan that describes the tasks that would enable another qualified operator to assume the operation of the system in an emergency. Include tasks that will be completed:

☐ Daily
☐ Weekly
☐ Monthly
☐ Yearly

Include non-routine activities relating to:

☐ Positive analytical results
☐ Complaints
☐ Emergency operational practices
☐ Record keeping
☐ Other duties

Templates for a number of sample operations plan can be found on the CDPH web site at:

http://www.cdph.ca.gov/certlic/drinkingwater/Pages/TMF.aspx

Comments _____

_____

6. Training

[Funding Projects, New Systems, and Changes of Ownership - ***Necessary***]

Submit a plan describing the training that will be provided to ensure that everyone associated with the water system has the knowledge to competently comply with existing requirements and to be informed about new compliance requirements, new technologies, and newly identified hazards. The plan needs to describe the training for the following:

☐ Certified operators: Contact hours needed to maintain operator certification at the required grade for the system and other related training.
☐ Governing board and managers: Training that covers board and management roles and responsibilities including ethics and financial management.
☐ Other staff: Pertinent training to enable all staff to competently perform activities necessary to the operation and maintenance of the system.

Comments _____

_____

7. Ownership

[Funding Projects; New Systems, and Changes of Ownership - ***Mandatory***]

Ownership must be clearly identified for all components of the water system. Check the type of water system ownership:

☐ Sole proprietorship
☐ Partnership
☐ Corporation
☐ Mutual
☐ Governmental agency
☐ Other formation type

A copy of the deed for any well locations may document both ownership and water rights. Provide the following ownership documentation as hard copies or in electronic format:

☐ Formation papers such as incorporation articles, partnership documentation, by-laws, and governing ordinances. ☐ NA

☐ Deeds and other ownership documentation of all system property including land, buildings, wells, storage tanks, treatment facilities, and other system components. ☐ NA

☐ Easements, leases, or agreements for long term use regarding land or system components that are not owned by the water system. Specify the duration of the authorization. ☐ NA

☐ Encumbrances, trust indentures, bankruptcies, decrees, legal orders, or other items that may affect the owner's control of the water system. ☐ NA

☐ If the water system is under temporary ownership such as a developer, describe the timing for the change in ownership and the contact information for the eventual owner. ☐ NA

☐ If the owner of the water system has owned or managed any other public water system within the last ten years, list these systems by name and number. ☐ NA

☐ For a sole proprietor submit a plan that describes how the system will continue to be operated in the event the owner becomes incapable of carrying out this responsibility.
☐ NA

Comments _____

_____

8. **Water Rights**
[Funding Projects; New Systems, and Changes of Ownership - ***Mandatory***]

Provide the following documentation as hard copies or electronic format:

☐ List the current and emergency water sources that will be used to operate the system including groundwater, surface water, purchased water, and any other sources.

_____

☐ Describe the long-term availability of the sources used by the water system to meet a projected 10-year water demand._____

_____

Groundwater: ☐ Yes ☐ No

- Unadjudicated Basin: Provide the following: ☐ NA

  ☐ A statement that the groundwater is extracted from a basin that is not adjudicated.

  ☐ Copies of the deeds for the parcels of each unadjudicated groundwater source used by the system.

- Adjudicated Basin: Attach the deed for the parcels of each adjudicated groundwater source that notes the adjudication or provide documentation of the Basin Water Master's terms of the adjudication as they relate to the water system's right to extract water from the adjudicated basin. ☐ NA

Surface Water: ☐ Yes ☐ No

Circle the type of water rights the water system holds for surface water from the list below:

a. Appropriative
   1) Pre-1914
   2) State Water Resources Control Board (SWRCB) Permit or License

b. Riparian

Appropriative

☐ If Pre-1914, provide a statement that water rights were established prior to 1914. ☐ NA

☐ If after 1914, provide a copy of the SWRCB water rights permit or license. Note that an application to the SWRCB does not document water rights. ☐ NA

Riparian

☐ Provide a statement that water is derived from a surface source pursuant to a riparian right. ☐ NA

Purchased Water: ☐ Yes ☐ No__

☐ Provide a copy of the water service agreement for purchased water that specifies the duration of the authorization. Note that for funding projects the long term use agreements must extend for the life of the loan or a minimum of 20 years for grant funded projects. ☐ NA

Comments _____

_____

9. Organization

[Funding Projects – ***Necessary***; New Systems, and Changes of Ownership - ***Mandatory***]

In order to establish the lines of authority and communication between employees and management including the governing board, managers, certified operators, and clerical staff, provide a:

☐ Structural organizational chart for positions associated with the water system that indicates the lines of authority. Specify the frequency of board meetings where appropriate.

☐ Separate chart that lists the names and phone numbers of the specific people who fill those positions. Update this information as needed.

☐ List on the organization charts information on any contract certified operators the system may utilize. Indicate the level of certification and the number of hours for which the services of a certified operator are contracted. ☐ NA

Comments _____

_____

10. Emergency Response Plan

Water System Number _____

[Funding Projects – ***Necessary***; New Systems, and Changes of Ownership - ***Mandatory***]

A sample emergency response plan template is located on the CDPH website at:

http://www.cdph.ca.gov/certlic/drinkingwater/Documents/TMFplanningandreports/EmergencyResponsePlan_revised.doc

Ensure that the emergency response plan for the water system includes:

☐ A list of all disasters and emergencies that is likely to occur in the water system's service area. Include earthquakes, fires, and disinfection failure at minimum as well as flooding, water outages, water contamination, power outages, and other potential local emergencies.

☐ The names and contact information of water system personnel including the decision makers. Identify responsibilities, and provide a clear chain of command.

☐ An inventory of system resources used for normal operations and available for emergencies including maps and schematic diagrams, lists of emergency equipment and suppliers, emergency contract agreements, and emergency water interconnections or sources.

☐ A communication network that describes a designated location for an emergency operations center, emergency contact information for equipment suppliers, emergency phone and radio communication capabilities, coordination procedures with governmental agencies for health and safety protection, technical and financial assistance, and public notification procedures.

☐ Emergency procedures to quickly assess damage to water system facilities including logistics for emergency source activation and repairs, procedures for monitoring progress of repairs and restoration, and procedures for documenting damage and repairs.

☐ Describe steps that will be taken to resume normal operations and to submit reports to appropriate agencies.

Comments _____

_____

11. Policies

[Funding Projects; New Systems, and Changes of Ownership - ***Necessary***]

☐ A policy manual has been adopted that describes procedures pertinent to the management of the water system. At a minimum the policies described should cover:

a. Nonpayment of water charges
b. Unauthorized use of water
c. Hours worked and overtime

d. Complaint responses
e. Contract operators, if applicable
f. Governing board activities such as regulatory responsibilities, expenditure allowances, meeting notifications, resolution adoptions, and other issues as applicable

Comments _____

_____

12. Budget Projection / Capital Improvement Plan
[Funding Projects; New Systems, and Changes of Ownership - ***Mandatory***]

Use the sample 5-year budget projection/capital improvement plan (CIP) template, or an equivalent alternative, that is located on the CDPH website at http://www.cdph.ca.gov/certlic/drinkingwater/Documents/TMFplanningandreports/swsbudgetcalculator-CIPandMinRateGen.xls . This file consists of guidelines for completing this spreadsheet on the first Excel tab, the 5-year budget projection on the second tab, and the CIP on the third tab.

Submit the following:

☐ 5-Year budget projection/CIP template

☐ Documentation that reserve funds have been created for the CIP, operations and maintenance expenses, potential emergency needs, and any other reserve accounts necessary for the management of the system.

☐ Documentation of the current rate structure. ☐ NA

☐ Documentation of the average annual cost of water per connection for the last calendar year. ☐ NA

☐ Documentation that revenues cover expenses including the CIP reserve, or describe the plan to increase revenues to cover these expenditures? ☐ NA

☐ Where appropriate, include the Proposition 218 voter approval process that will be followed if a rate increase is planned. ☐ NA

☐ For investor owned systems documentation from the California Public Utilities Commission of an approved budget, CIP, and rate schedule. ☐ NA

☐ NEW SYSTEMS OR FUNDING PROJECTS ONLY: Proposed rate structure. ☐ NA

☐ NEW SYSTEMS OR FUNDING PROJECTS ONLY: Estimated average annual cost of water per connection based on the proposed new funding amount. ☐ NA

Comments _____

_____

13. Budget Control

[Funding Projects - ***Necessary;*** New Systems, and Changes of Ownership - ***Mandatory***]

A financial policy that includes:

☐ Budget control procedures in which one person records a transaction and a manager review and approves it. Describe budget controls for:
   a. Cash receipts and disbursements
   b. Bank accounts
   c. Payroll

☐ Financial reports prepared for review by governing board such as:
   a. Customer Receivables Report
   b. Check Register Review
   c. Bank Reconciliation Report
   d. Budget Comparison Report
   e. Quarterly Comparative Balance Sheet
   f. Tax Returns

☐ Criteria and withdrawal guidelines for the maintenance of reserve accounts including:
   a. CIP Reserve
   b. Operations and Maintenance Reserve
   c. Contingency or Emergency Reserve
   d. Other Reserves

☐ Reporting procedures to appropriate levels of authority to ensure that there is no commingling of revenue sources. ☐ NA

☐ Periodic reviews of the budget status by a Certified Public Accountant or appropriately qualified financial officer of the water system to ensure continuing financial viability. Three years of the most current audited financial reports must be submitted for all CDPH funding projects. ☐ NA

Comments _____

_____

APPENDIX M

CALIFORNIA FINANCING COORDINATING COMMITTEE, 2014 FUNDING FAIRS FLYER AND 2014 FUNDING FAIRS HANDBOOK

NO COST

2014 CFCC Funding Fairs

Please join the California Financing Coordinating Committee (CFCC) for this no-cost event.

2014 SCHEDULE

May 28, 2014
Cal/EPA Headquarters
Coastal Hearing Room
1001 "I" Street
Sacramento, CA 95814

August 20, 2014
Shasta/Redding Library
110 Parkview Ave
Redding, CA 96001

September 9, 2014
Fresno State University
North Gym, Room 118
5241 North Maple Ave
Fresno, CA 93740

September 11, 2014
San Luis Obispo City County Library
995 Palm Street
San Luis Obispo, CA 93401

September 23, 2014
Kern County Health Department
1800 Mt Vernon Ave
Bakersfield, CA 93306

September 25, 2014
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572

October 9, 2014
Cal/EPA Headquarters
Coastal Hearing Room
1001 "I" Street
Sacramento, CA 95814
The Sacramento workshop will be webcast. Access to the webcast will be available online at: http://www.calepa.ca.gov/broadcast.

CFCC agencies fund the following types of eligible infrastructure projects including:

- Drinking water
- Wastewater
- Water quality
- Water supply
- Water conservation
- Solid waste
- Energy efficiency
- Flood management
- Streets and highways
- Emergency response vehicles
- Water use efficiency
- Community facilities

AGENDA

At each location, the Funding Fair Agenda is as follows:
Check in: 8 a.m.-8:30 a.m.
Agency Presentations: 8:30 a.m.-Noon
Discuss your projects: Noon-3 p.m.

ATTENDEE REGISTRATION

Go to www.cfcc.ca.gov and click on **Funding Fairs**
Funding Fair Questions?
Please call (916) 447-9832 x 1029

For more information, please visit our web site at: www.cfcc.ca.gov

California Financing Coordinating Committee (CFCC)

What is CFCC?

The California Financing Coordinating Committee (CFCC) was formed in 1998 and is made up of seven funding members: five state, two federal. CFCC members facilitate and expedite the completion of various types of infrastructure projects helping customers combine the resources of different agencies. Project information is shared between members so additional resources can be identified. CFCC members conduct free funding fairs statewide each year to educate the public and potential customers about the different member agencies and the financial and technical resources available.

Purpose of CFCC Funding Fairs

CFCC Funding Fairs provide opportunities to obtain information about currently available infrastructure grant, loan and bond financing programs and options. Each attendee receives a copy of all slide presentations and additional useful infrastructure financing material. Funding Fairs also provide an opportunity for attendees to speak directly with program staff about specific projects and issues affecting their community.

Who should attend?

Representatives from public works, local governments, and California Native American Tribes. This includes city managers and planners, economic development and engineering professionals, officials from privately owned facilities, water and irrigation district managers, financial advisors and project consultants.

Eligible Project Types

CFCC Agencies fund the following types of eligible projects such as drinking water, waste water, solid waste, water quality, water supply, water conservation, energy efficiency, flood management, community facilities, streets and highways, and emergency response vehicles.

CFCC Information

Please log on to the CFCC website at www.cfcc.ca.gov for the 2014 Funding Fair schedule, CFCC Member Directory and general information.

California Department of Public Health · Department of Water Resources, State of California · Housing and Community Development, California · I-BANK · California Water Boards · U.S. Department of the Interior, Bureau of Reclamation · USDA United States Department of Agriculture

California Financing Coordinating Committee

2014 Funding Fairs

INFRASTRUCTURE FINANCING FOR THE 21ST CENTURY

California Financing Coordinating Committee (CFCC)

What is CFCC?

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CFCC Information

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TABLE OF CONTENTS

2014 California Financing Coordinating Committee (CFCC) Funding Fairs

CFCC Workshop Notes:

2014 CFCC MEMBER DIRECTORY

www.cfcc.ca.gov

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

Drinking Water Technical Programs Branch
1616 Capitol Avenue (MS 7418)
P.O. Box 997377
Sacramento, CA 95899-7377
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Web Site:
www.cdph.ca.gov/certlic/drinkingwater/pages/DWPFunding.aspx

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DEPARTMENT OF WATER RESOURCES (DWR)

P.O. Box 942836; Sacramento, CA 94236
901 P Street - Bonderson Building; Sac, CA 95814
Phone: (916) 651-9251 / Fax: (916) 651-9607
Web Site: www.water.ca.gov
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Ms. Leslie Pierce
Division of Statewide Integrated Water Management
Project Services Office
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Leslie.Pierce@water.ca.gov

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)

Community Development Block Grant Program
2020 West El Camino Avenue, Suite 500
Sacramento, CA 95833
Phone: (855) 333-CDBG (2324)
Web Site: http://www.hcd.ca.gov/fa/cdbg/index.html

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ED and Colonia Allocation
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January 2014

CALIFORNIA INFRASTRUCTURE AND ECONOMIC DEVELOPMENT BANK (IBank)

Infrastructure State Revolving Fund (ISRF) Program
P.O. Box 2830; Sacramento, CA 95812-2830
980 9th Street, Suite 900; Sacramento, CA 95814
Phone: (916) 322-1399 / Fax: (916) 322-6314
Web Site: www.ibank.ca.gov
Email: ibank@ibank.ca.gov

Mr. Ruben Rojas
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Phone: (916) 327-2029
ruben.rojas@ibank.ca.gov

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ISRF Manager
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STATE WATER RESOURCES CONTROL BOARD (SWRCB)

Division of Financial Assistance
1001 I Street - 16th Floor; Sacramento, CA 95814
Phone: (916) 327-9978 / Fax: (916) 341-5707
Web Site: www.waterboards.ca.gov/water_issues/programs/grants_loans/srf
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Mr. Christopher Stevens, Chief
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and Special Programs Section
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Small Community Wastewater
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Ms. Conny Mitterhofer
Expanded Use Projects
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U.S. DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION (USBR)

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Lee Mao
Chief, Program Management Branch
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US DEPARTMENT OF AGRICULTURE (USDA) Rural Development

430 G Street, Agency 4169
Davis, CA 95616-4169 / Fax: (530) 792-5837
Web Site: www.rurdev.usda.gov/ca

Ms. Janice Waddell
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Mr. David Hartwell
Community Programs Specialist
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Ms. Anita Lopez
Community Programs Specialist
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Mr. Pete Yribarren
Community Development Specialist
Phone: (559) 734-8732 ext.108
pete.yribarren@ca.usda.gov

January 2014

CFCC Workshop Notes:

USDA Rural Development

Dave Hartwell
Community Programs Specialist

Mission Areas

- Community Programs
  - Water/Wastewater & Community Facilities
- Housing Programs
  - Single & Multi-Family
- Business & Cooperative Programs

Other Utility Programs

Electric Programs
- Contact: Larry McGraw
- (505) 892-0353 | Larry.Mcgraw@wdc.usda.gov

Telecommunications
- Broadband, Distance Learning & Telemedicine
- Contact: Robert Machado
- (530) 792-5811 | Robert.Machado@ca.usda.gov

Eligible Areas

Must be outside a city, town or census designated place.

- Water/Waste Programs **under 10,000**
- Community Facilities **under 20,000**

Eligible Applicants

- **Nonprofit Organizations -** broadly based and have significant community support
- **Federally Recognized Indian Tribes**
- **Public Bodies -** including cities, counties and special district
- **Mutual Water Companies**

Community Facilities Program

- Direct & Guaranteed Loans, Grants
- Health Clinics, Community Centers, Day Care
- Police / Fire Stations & Vehicles
- Libraries/Bookmobiles
- Food related projects
- Rates & Terms: Useful life or 40 years
- Population 20,000 or less
- Applications accepted all year

USDA United States Department of Agriculture

Water & Waste Disposal Program

- Water Systems
- Wastewater Systems
- Solid Waste Disposal
- Storm Drainage
- Sanitary Landfills
- Transfer Stations

USDA United States Department of Agriculture

Water System Improvements

- Supply
  - Groundwater
  - Surface water
- Treatment
- Storage
- Distribution
- Solar

USDA United States Department of Agriculture

Water System Improvements

- Sewer Collection
- Sewer Treatment
- Effluent Disposal
- Solar

USDA United States Department of Agriculture

Funding Opportunities

Water & Waste Disposal Loan/Grant Program

- Low interest loans: Currently 2.50% - 4.00%
- Useful life of the facility or 40 years
- Grants up to 75% or $1 million max
- Priority to low-income communities correcting health or sanitary problems.

Special National Programs

- Colonias Grant: w/in 150 miles of Mexican border
- Native American Grant Set-a-Side: $1 million max
- Emergency Community Water Assistance Grant (ECWAG)

USDA United States Department of Agriculture

Eligible Loan/Grant Purposes

- Planning/Engineering/Architectural
- Environmental
- Legal
- Acquire Land and Rights
- Connection Fees

USDA United States Department of Agriculture

Loan Only Purposes

- Interest
- Initial Operating
- Purchase of Existing Facilities (water/sewer)
- Refinancing

USDA United States Department of Agriculture

Repayment Ability

Cover

- Operating budget for the enterprise
- New and existing debt
- Debt service reserve
- Short Lived Asset Reserve
- Some capital improvements

USDA United States Department of Agriculture

Security

Tribes

- Promissory Note
- Assignment of Tribal Income

Public Bodies

- BONDS
- General obligation bond and/or
- Pledge of taxes or assessment and/or
- Pledge of facility revenue and lien on all land, easements, right-of-way...

USDA United States Department of Agriculture

Security

Non-Profit Organizations

- Promissory note
- Assignment of income
- Deed of trust on all land, easements, right-of-way...
- UCC financing statement
- Loan resolution/security agreement

USDA United States Department of Agriculture

Application Process

- Building community support
- Initial Meeting with USDA
- Pre-Application
- Full Application
- Letter of Conditions
- Obligate Funding
- Disbursement of funds after all conditions are met

USDA United States Department of Agriculture

Application Components

- SF 424
- Intergovernmental Review
- **Preliminary Engineering Report**
- Other Credit Certification
- Supporting Documentation
- **Environmental Report**
- **Operating Budget / First Full Year**
- **Three Years Audited Financials**

USDA United States Department of Agriculture

Funding Cycle

Federal Fiscal Year

October 1 - September 30

Applications accepted throughout the year

USDA United States Department of Agriculture

Contacts – Northern CA

Kevin DeMers, Yreka
(530) 842-6123 x112

Mike Colbert, Alturas
(530) 233-4137 x112

Michael Velez, Auburn
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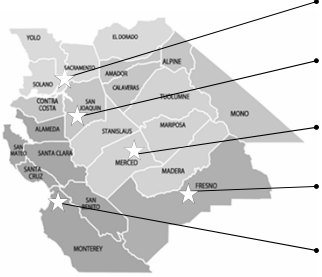
Reef Atwell, Santa Rosa x104
Quinn Donovan, Santa Rosa x105
(707) 526-6797

USDA United States Department of Agriculture

Contacts – Central CA



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Jose Guardado, Merced
C:(209) 918-5303 | O:(209) 538-3783

Sally Tripp, Fresno
(559) 276-7494 x132

Katie Schmitt, Salinas
(831) 757-5294 x130

USDA United States Department of Agriculture

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Al Correale, Santa Maria
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Luis Andrade, El Centro x108
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USDA United States Department of Agriculture

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Pete Yribarren (559) 734-8732 x108

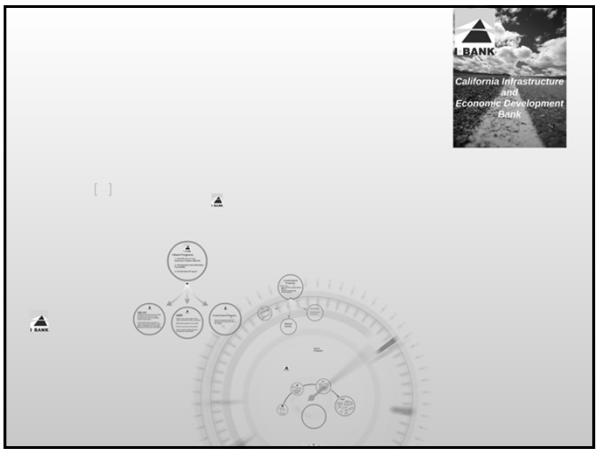
USDA United States Department of Agriculture

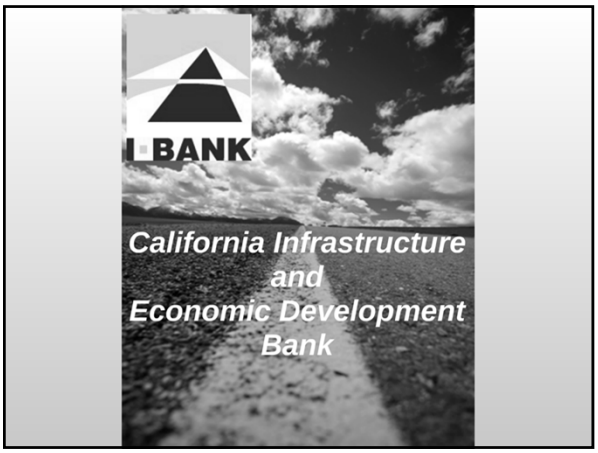
USDA Rural Development
430 G Street, Agency 4169
Davis, CA 95616

Phone: (530) 792-5800

www.rurdev.usda.gov/ca

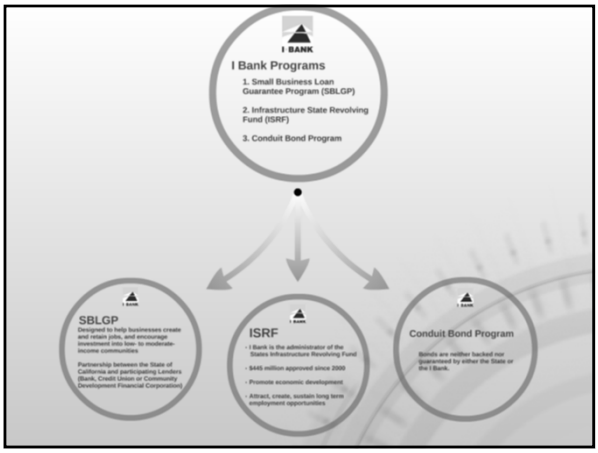
CFCC Workshop Notes:


I BANK
California Infrastructure and Economic Development Bank


I BANK
California Infrastructure and Economic Development Bank


I BANK
I Bank Mission
• Finance public infrastructure and private development
• Promote a healthy climate for jobs
• Contribute to a strong economy
• Improve the quality of life in California communities


I BANK
5 Member Board of Directors
22 finance, legal, and administrative professionals
All working together to provide timely and responsive financial products to borrowers


I BANK
I Bank Programs
1. Small Business Loan Guarantee Program (SBLGP)
2. Infrastructure State Revolving Fund (ISRF)
3. Conduit Bond Program
SBLGP
Designed to help businesses create and retain jobs, and encourage investment into low- to moderate-income communities
Partnership between the State of California and participating Lenders (Bank, Credit Union or Community Development Financial Corporation)
ISRF
• I Bank is the administrator of the States Infrastructure Revolving Fund
• $445 million approved since 2000
• Promote economic development
• Attract, create, sustain long term employment opportunities
Conduit Bond Program
Bonds are neither backed nor guaranteed by either the State or the I Bank.


I BANK
SBLGP
Designed to help businesses create and retain jobs, and encourage investment into low- to moderate-income communities
Partnership between the State of California and participating Lenders (Bank, Credit Union or Community Development Financial Corporation)

What can SBLGP loans finance?

- Lines of Credit and Permanent Working Capital
- Inventory
- Building Purchase and New Construction
- Tenant Improvements
- Equipment
- Business Purchase
- Debt Refinance, under certain conditions

SBLG BENEFITS

- Directed at newer/less capitalized small businesses that have difficulty getting loans.
- Allows a small business to establish a favorable credit history with a lender.
- Collateral available that is inadequate to meet conventional requirements may qualify under State program
- Provided through the Financial Development Corporation (FDC) network, which can offer small businesses more personalized service.

What are SBLGP's general eligibility requirements?

- For-profit and non-profit business
- Maximum of 750 employees
- Demonstrate repayment ability
- Varied set of other prohibited business purposes, such as:
  - Lending, real-estate development, investments, pyramid sales or speculation

I BANK

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ISRF

- Subsidized loans for public entities
  - 50k ⟶ 25m
  - Flexible terms
  - Discounted interest rate
  - No match required
- Applications accepted year round
- 18 categories of eligibility

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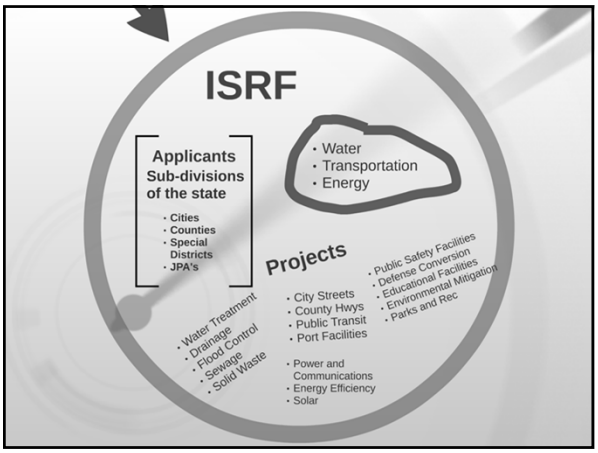
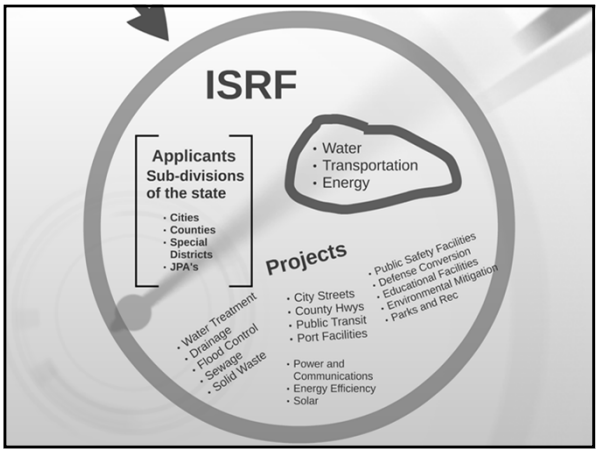


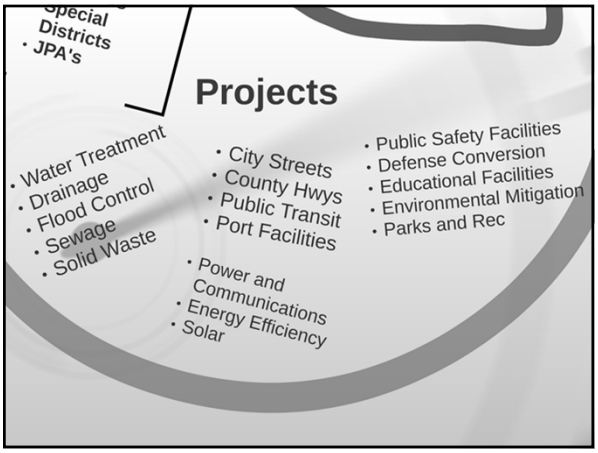
Applicants
Sub-divisions of the state

- Cities
- Counties
- Special Districts
- JPA's

Pro

- Water
- Transportation
- Energy





ISRF Project: Sacramento Del Paso Boulevard Streetscape Project

Before

After

Streetscape Project

Before

After

ISRF Project: City of Porterville Wastewater Treatment Facility Upgrade & Sludge Disposal Project

Before

After

Before

After

CITY OF DAVIS
Water Storage Tank Project

Project Description
- 4 million gallon municipal water storage tank
- 8.6 million gallon pump station
- System piping and transmission mains

Project Financing
- 30 year term / 4.00%
- I-Bank $10,000,000
- City of Davis $ 806,000
- TOTAL $10,806,000

Economic Benefits
- Needed for major retail store in new development aimed at reducing sales tax leakage
- Projected creation of 103 full-time equivalent jobs

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Conduit Bond Program

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Conduit Bond Programs

Product Lines
- Industrial Development Bonds
- 501(c)3
- Exempt Facility Bonds
- Revenue Bonds

IDB's

- Tax exempt bonds issued by a government entity for eligible manufacturing and processing plants
- $10m max
- Payable from revenue generated by pvt owned facility

Gov't Bonds

- Exempt Facility Bonds
- Revenue Bonds

501(c)3 Bonds

IDB's

- Tax exempt bonds issued by a government entity for eligible manufacturing and processing plants
- $10m max
- Payable from revenue generated by pvt owned facility

Manufacturer of professional quality photographic printing and finishing

$8,775,000 for acquisition of 17 acres of land and existing buildings totaling 140,000 square feet

Bonds backed by a Letter of Credit

Project is expected to create an estimated 78 new positions

Industrial Development Bond Project: Bay Photo, Inc. (Scotts Valley)

---

f land
square

ted 78

Industrial Development Bond Project: Bay Photo, Inc. (Scotts Valley)

Manufacturer of professional quality photographic printing and finishing

$8,775,000 for acquisition of 17 acres of land and existing buildings totaling 140,000 square feet

Bonds backed by a Letter of Credit

Project is expected to create an estimated 78 new positions

Industrial Development Bond Project:
Hydro Systems, Inc. (Valencia)

- $2.5 to finance solar panel install
- Reduction in energy cost by 70%

Conduit Bond Programs

Product Lines
- Industrial Development Bonds
- 501(c)3
- Exempt Facility Bonds
- Revenue Bonds

IDB's
- Tax exempt bonds issued by a governmental entity to engage manufacturers and processing plants
- $10m max
- Payable from revenue generated by JVA owned facility

Gov't Bonds
- Exempt Facility Bonds
- Revenue Bonds

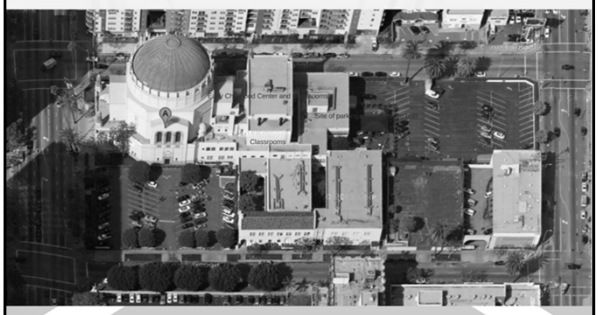
501(c)3 Bonds

501(c)3 Bonds

501(c)3 Bonds

- Charitable
- Religious
- Educational
- Scientific
- Literary
- Public Safety
- Prevention for cruelty to children or animals

Wilshire Boulevard Temple School



The Broad Collection (Los Angeles)

- 40-50 full time jobs
- Publicly offered fixed rate tax exempt bonds
- 10 year term

The Broad Collection (Los Angeles)

501(c)(3) Non-Profit Projects

Contemporary Jewish Museum

Goodwill

SEA Education

California Academy of Sciences

Academy of Motion Pictures

Scripps

Santa Barbara Center for Performing Arts

Conduit Bond Programs

Product Lines
- Industrial Development Bonds
- 501(c)3
- Exempt Facility Bonds
- Revenue Bonds

IDB's
- Tax exempt bonds issued by a state or municipal entity for eligible manufacturing and processing uses
- $10m max
- Payable from revenue generated by purchased facility

Gov't Bonds
- Exempt Facility Bonds
- Revenue Bonds

501(c)3 Bonds

Gov't Bonds

- Exempt Facility Bonds
- Revenue Bonds

Bonds for Governmental Entities

Toll Bridge Seismic Retrofit Program (Caltrans)

$1.1 billion to finance the seismic retrofitting of seven State-owned bridges in the Bay Area and Southern California

Clean Water State Revolving Fund Program (SWRCB)

$300 million to provide additional loan funds for the SWRCB's Clean Water State Revolving Fund (2002)

ISRF and Conduit Bond Project: Rough and Ready Island (Port of Stockton)

I-BANK

CFCC Workshop Notes:

CDBG Infrastructure Financing

State of California
Department of Housing and Community Development

Community Development Block Grant (CDBG)

- **Federally funded grant program run by Dept. of Housing and Urban Development (HUD)**
- **Created by the Housing and Community Development Act of 1974**
- **<u>Grants are given only to cities and counties</u>**
- **State administers "non-entitlement" program & HUD administers "Entitlement" program for large cities and urban counties**

Eligible Activities (state)

- **Federal Statute lists 25 eligible activities**
- **State CDBG groups them into 8 main categories**
- **The first six activities are Community Development (CD) Program only**

1. **Housing Rehabilitation**
2. **Housing Acquisition**
3. **Housing New Construction**
4. **Public Improvements**
5. **Public Facilities**
6. **Public Services**
7. **Economic Development Activities (ED) (3 types)**
8. **Planning and Technical Assistance (ED & CD)**

Three National Objectives (federal)

- **All programs & projects must meet one of the three National Objectives:**

1. **Principally Benefit Low-income Households (housing) or Persons. These are beneficiaries with incomes at or below 80% of county median income**
2. **Mitigate Slums and Blight (area or spot basis) primarily eligible in Economic Development program**
3. **Meet an Urgent Need – used only for disasters**

Annual Notice of Funding Availability (NOFA)

- **NOFA released January each year. Includes Allocations for:**
- **Community Development**
- **Economic Development -** Enterprise Fund (EF) and Over-The-Counter (OTC)
- **Native American**
- **Colonias**
- **Planning and Technical Assistance**
  - All are Competitive except OTC is first-come-first-serve

Community Development (CD), Native American & Colonias Funding Levels

- **Grants to jurisdictions to assist with meeting local development needs**
- **Three Allocations within NOFA:**
  - **CD Allocation** open to all eligible jurisdictions (largest at approx. $20 million for 2014)
  - **Native American Allocation** only for non-recognized tribes or terminated rancherias (smallest at approx. $500,000 per year)
  - **Colonias Allocation** only for designated communities within 150 miles of border with Mexico ($2 million for 2014)

Community Development Allocations

- Traditionally has funded housing activities, primarily Housing Rehabilitation and Homeownership Assistance programs
- In the last two years, over half of annual awards have funded Public Infrastructure and Facility projects
- Colonias Allocation can only be used for:
  - Potable Water
  - Sewer
  - Decent and safe Housing

Public Infrastructure in Support of Housing New Construction

- City of Oroville 2006 CDBG Grant $850K for Off-site Improvements
- Hillview Ridge Apt. 72 low income units
- Project funded by HOME, CDBG, tax credits

Non-Housing Activities

- Public Infrastructure & Facility projects must benefit at least 51% Low Income persons in the area served (higher benefit needed to be competitive)
- Project must also address a health and safety problem
- **Note:** CDBG funds can be used under a housing rehab activity to pay for private lateral services (including meters)

Water System Public Infrastructure

Installation of new water system in Placer County, included installation of private laterals for low income households.

Health Care Public Facility

Before and after photos of Del Norte Healthcare District's Clinic in Crescent City. CDBG and USDA funding for greatly expanded facility providing services to low income families.

Economic Development (ED)

- **Grants to jurisdictions that provide funds to support businesses**
- **Two Allocations:**
  - Enterprise Fund Programs
    - Business Assistance Activities
    - Microenterprise Activities
  - Over the Counter Projects
    - Direct Assistance to Business
    - Off-site Infrastructure

Over the Counter (OTC)

- **Large Project Funding for Eligible Activities**
- **Funding**
  - **Annual allocation of six million (approximately)**
  - **Applications are received on a continuous basis**
  - **Projects up to $3 million (possibly higher if multi-year)**
- **Activities**
  - **Direct Financial Assistance (non-profit or for profit)**
  - **Off-site Infrastructure in support of business or development**

State CDBG staff recommends applications to HCD's Internal Loan Committee for ED, which can review and approve grant to sponsoring jurisdiction

ED Public Infrastructure in Support of Shopping Center

Public Infrastructure in support of a retail shopping center. I-Bank and CDBG funded infrastructure on Hwy 49 in Placer County for Auburn Plaza.

ED Public Facility for Commercial Fishing Fleet

Del Norte County, Crescent City Harbor District Inner Boat Basin Commercial Fishing Facility, before 2011 Tsunami, after Tsunami and after 40 million dollar reconstruction using CDBG, Cal EMA and USDA funding.

15

Planning and Technical Assistance (PTA) NOFA

- **Eligible study activities:**
  - ED Project Feasibility Study
  - Pre- Engineering and Pre- Architectural Design
  - Housing Conditions Survey Study
- **Maximum of $100,000 per year, ED or CD, 2 Studies.**
- **Major changes to eligible planning study activities in 2014 NOFA. See NOFA for details.**

Program Income Funded Water Project

Eel River Infiltration Gallery for Rio Dell Water System, $100,000 in CDBG program income funds paid for final design and environmental. Other funders included Department of Public Health and USDA.

CDBG Overlay Requirements

- Federal requirements:
  - **Environmental Reviews (NEPA)**
  - **Prevailing Wage: Davis-Bacon & Related Acts**
  - **Relocation / Acquisition: URA Federal Law**
  - **Competitive Procurement of All Goods and Services**
  - **Equal Opportunity**
  - **Citizen Participation – notices, hearings, public information files**
- State CDBG Grant Management Manual available on website

For More Information On CDBG

- **State CDBG Program**
  - **Program Secretary: (855) 333-CDBG(2324)**
  - **Program Website: http://www.hcd.ca.gov/fa/cdbg/index.html**
  - **Subscribe to Email List:** http://www.hcd.ca.gov/fa/dfa_subscriber.html
- **Entitlement CDBG:**
  - **Contact the community development department of your local government**

Other HCD Programs:

- Housing Policy Division's (HPD) Parks NOFA:
  - See HPD flyer and Contact HPD Staff at:
    Website: www.hcd.ca.gov/hpd/hrpp
    E-mail: Housing_parks@hcd.ca.gov
    Phone: 916-263-2911
- Division of Financial Assistance (DFA) Drought NOFA "COMING SOON":
  - Get on Department's HOME and CDBG e-mail list to receive drought NOFA information: http://www.hcd.ca.gov/fa/dfa_subscriber.html
  - **California is in a drought emergency. Visit *http://www.SaveOurH2O.org* to help save water.**

CFCC Workshop Notes:

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF FINANCIAL ASSISTANCE (DFA)

Providing Financial Assistance for Projects that Serve the Water Boards' Mission: Preserve, Enhance, and Restore California's Water Resources

http://www.waterboards.ca.gov

Slide No. 1

PRESENTATION TOPICS

- Clean Water State Revolving Fund Program
- Water Recycling Funding Program
- Small Community Wastewater Program
- Other DFA Programs
- Resources

Slide No. 2

CLEAN WATER STATE REVOLVING FUND (CWSRF) PROGRAM

- Low interest financing for water quality projects
- Funding for:
  - Wastewater and Water Recycling Projects
  - Expanded Use (Nonpoint Source) Projects
- Annually funds between $200 - $300 million

Note: Drinking Water State Revolving Fund (DWSRF) Program administered by the California Department of Public Health

Slide No. 3

CWSRF PROGRAM:
WASTEWATER AND WATER RECYCLING
(SECTION 212 of Clean Water Act)

Construction of publicly-owned facilities

- Wastewater treatment
- Local sewers
- Sewer interceptors
- Water reclamation facilities

Slide No. 4

CWSRF PROGRAM:
EXPANDED USE PROJECTS
(SECTIONS 319 & 320 of Clean Water Act)

Expanded Use Projects include, but not limited to:

- Nonpoint source (NPS) projects identified in California's NPS Plan
- Development and implementation of an estuary comprehensive conservation & management plan
- Stormwater reduction and treatment facilities, etc.

Slide No. 5

CWSRF PROGRAM: FINANCING TERMS

- Interest Rate: ½ most recent General Obligation Bond Sale at time of funding commitment (typically 2 - 3%)
- Financing Term: Up to 30 years or the useful life of the project
- Repayment: Annual payments begin 1 year after completion of construction

Slide No. 6

CWSRF PROGRAM: PRINCIPAL FORGIVENESS/GRANTS

	FY 2011	FY 2012	FY 2013	FY 2014
Principal Forgiveness (PF) - Federal Capitalization Grants				
Category 1	$19,572,892	$5,055,894	$4,047,976	$4,911,155
Category 2	$13,048,594	$3,370,596	$2,698,651	$3,274,104
TOTAL PF	$32,621,486	$8,426,490	$6,746,627	$8,185,259
Small Community Grant (SCG) Fund – Assembly Bill 2356				
Category 1 Only	$1 million	$12 million	$15 million	$1 million
TOTAL (PF + SCG)	**$33,621,486**	**$20,426,490**	**$21,746,627**	**$9,185,259**

Category 1 = Small (<20,000 people) Disadvantaged (Median Household Income [MHI] <80% of Statewide MHI) Community (SDAC) with substantial water quality investment (i.e., wastewater rates >1.5% of MHI)
Category 2 = SDAC with wastewater rates <1.5%, Larger DACs, Disadvantaged Area of Larger Community, etc.

Slide No. 7

CWSRF PROGRAM: APPLICATION SUBMITTAL

- CWSRF applications accepted on a continuous basis
- One application package used for both Wastewater /Water Recycling Projects, and Expanded Use Projects
- Electronic or hard copy submittal
  - Financial Assistance Application Submittal Tool (FAAST): https://faast.waterboards.ca.gov
  - Via email to cleanwatersrf@waterboards.ca.gov
  - Mail a CD and/or hard copy
- Funds, including principal forgiveness/grants, are committed in readiness-to-proceed order (i.e., upon completion and approval of the application)

Slide No. 8

CWSRF PROGRAM: TYPICAL FUNDING APPROVAL PROCESS

- Initial Financing Agreement
  - Funds committed after complete application is approved
  - Access planning and design disbursements (soft costs)
- Submit Final Budget Approval Package
- Amend Financing Agreement
  - Reflects final project costs based on selected bid
  - Access to construction funds
  - Details eligibility determinations

Slide No. 9

CWSRF PROGRAM: CONTACT

Mr. Robert Pontureri, Senior Engineer

Email: robert.pontureri@waterboards.ca.gov

Phone: 916.341.5828

Website:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml

Slide No. 10

WATER RECYCLING FUNDING PROGRAM (WRFP)

- To promote use of treated municipal wastewater to augment or offset state/local water supplies:
  - Recycled water treatment,
  - Recycled water distribution, and
  - Groundwater recharge/reclamation
- For publicly-owned facilities, and privately-owned water utilities regulated by the Public Utilities Commission

Slide No. 11

WATER RECYCLING FUNDING PROGRAM (WRFP)

- Special provisions for Water Recycling construction projects:
  - Minimum Use Requirements: Initial delivery and total project capacity goals
  - Market Assurances: Mandatory use ordinance or user contracts required
  - Reporting Requirements: Annual Report on recycled water use for 5 years
  - Projects must be on Competitive Project List to be considered for WRFP construction grant funding
    - To be placed on the CPL please contact the WRFP
- Applications accepted on a continuous basis and funded in readiness to proceed order

Slide No. 12

WATER RECYCLING FUNDING PROGRAM (WRFP)

- Grants for planning
  - 50% of eligible costs to max of $75,000
- Low interest loans and limited grants for construction
  - 1% financing through CWSRF for a limited time
    - $800 million available at this rate
    - For near-term projects. In general, completed before January 17, 2017
    - Funding applications must be submitted by December 2, 2015
    - In response to the Drought to accelerate water supply enhancement projects
  - Standard financing term of 20-30 years at half the most recent General Obligation Bond Sale at time of funding commitment (typically 2 - 3%)

Slide No. 13

WRFP CONTACTS

Mr. Dan Newton, Senior Engineer
Email: dan.newton@waterboards.ca.gov
Phone: 916.324.8404

Website:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/

Slide No. 14

SMALL COMMUNITY WASTEWATER: CWSRF PROGRAM MODIFICATIONS

- Process disbursements within 30 days
- Refinance existing debts, when necessary to make proposed project more affordable
- Reduced interest rates as low as 0% (offered on a limited basis) for SDACs with wastewater rates greater than 1.5% of median household income:
- Principal Forgiveness/Small Community Grants (Slide 7)
- Planning Financing
  - Eligible "Category 1" planning financing applicants may receive 100% principal forgiveness/grants, not to exceed $500,000

Slide No. 15

SMALL COMMUNITY WASTEWATER: TECHNICAL ASSISTANCE (TA) CONTRACT

- To provide wastewater-related TA for SDACs
- Typically only 30-hours per community is provided
  - Additional time may be approved on a case-by-case basis
- Typical types of assistance:
  - Design and operational solutions
  - Preparation of financial assistance applications
  - Community outreach, awareness, education
  - Fiscal management and accountability
  - Capital improvement planning and asset management
  - Rate setting and the Proposition 218 process

Slide No. 16

SMALL COMMUNITY WASTEWATER: PROGRAM CONTACT

Ms. Meghan Tosney, Senior Engineer
meghan.tosney@waterboards.ca.gov
(916) 341-5729

Website:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/small_community_wastewater_grant/strategy.shtml

Slide No. 17

CLEANUP AND ABATEMENT ACCOUNT (CAA) PROGRAM

- October 2012 - State Water Board set aside $2 million in funding for <u>severely disadvantaged</u> communities
- Currently- funding has virtually same restrictions as CDPH Prop 84 Emergency funding:
  - interim replacement drinking water
  - public water systems that serve a severely disadvantaged community
  - water supply is affected by a waste (anthropogenic)
  - public water system has submitted pre-application to CDPH and been ranked on priority list
  - $50,000 max per public water system or $30 month/service connection
- The funding restrictions will be re-considered at an upcoming Board Meeting this summer to allow for more flexibility

Slide No. 18

CLEANUP AND ABATEMENT ACCOUNT (CAA) PROGRAM Cont'd

- April 2014 – State Water Board approved $4 million in funding for disadvantaged communities with a contaminated water supply
- Eligible Entities:
  - Public Agencies
  - Not-for-Profit Water Districts
  - Not-for-Profit Organizations
  - Tribal Governments
- Eligible Projects (not limited to):
  - Bottled Water
  - Vending Machines
  - Point-of-Use Devices (e.g: Filtration)
  - Hauled Water
  - Wellhead Treatment
  - Planning

Slide No. 19

CLEANUP AND ABATEMENT ACCOUNT: PROGRAM CONTACT

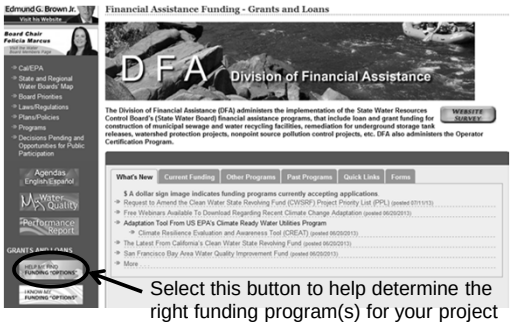
Ms. Conny Mitterhofer, Senior Engineer
conny.mitterhofer@waterboards.ca.gov
(916) 341-5720

Websites:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/caa/
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/caa/dw_droughtfund/index.shtml

Slide No. 20

New SWRCB Website

To help determine appropriate funding programs

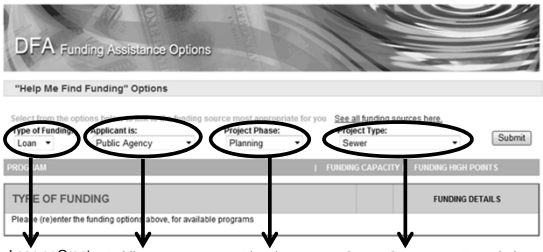


Select this button to help determine the right funding program(s) for your project

Slide No. 21

New SWRCB Website

To help determine appropriate funding programs



Loan or Grant

Public Agency
Nonprofit
Investor Owned Utility
Private

Planning
Design
Construction
Implementation

Sewer, Stormwater, Recycled Water, Seawater Intrusion, NPS Project, Estuary Project, and Monitoring, Education, Etc.

Slide No. 22

New SWRCB Website

To help determine appropriate funding programs

Slide No. 23

EXAMPLES OF OTHER DFA PROGRAMS

- See funding matrices at the back of the CFCC handbook for information about other programs:
  - Federal 319(h) Nonpoint Source Grant Program
  - Proposition 84 Clean Beaches Initiative (CBI) Grant Program
  - Areas of Special Biological Significance (ASBS) Grant Program
  - Underground Storage Tank Cleanup Fund (USTCF)
- You can also go to the DFA Webpage:
  http://www.waterboards.ca.gov/water_issues/programs/grants_loans/

Slide No. 24

Resources:
LYRIS Email Lists

- Subscription form can be accessed at:
  http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
- Available for many programs, including:
  - CWSRF: “Clean Water State Revolving Fund”
  - WRFP: “Water Recycling Funding Program”
  - SC Wastewater: “Small Communities Program”
  - CBI: “Beach Water Quality Grants”
  - USTCF: “Underground Storage Tanks Cleanup Fund”
  - ASBS: “Areas of Special Biological Significance (ASBS) Grant Program-Prop 84”

Slide No. 25

CFCC Workshop Notes:

California Department of Public Health

Funding for Public Water Systems

George Faggella
Capacity Development Coordinator

Division of Drinking Water and Environmental Management

CDPH Drinking Water Funding Programs

- Proposition 84 Emergency Grant Funding
- Drinking Water State Revolving Fund
- Water System Drought Emergency Funding

Prop. 84 EMERGENCY GRANT FUNDING

Prop. 84 EMERGENCY GRANT FUNDING

Part 1 Emergency Grants:

Provide funding for interim water supplies

- $50,000 Cap per public water system
  - Unable to provide drinking water meeting primary safe drinking water standards
  - Must be on DWSRF Project Priority List
  - Serving a severely disadvantaged community (MHI <60% Statewide MHI)

Prop. 84 EMERGENCY GRANT FUNDING

Part 2 Emergency Grants:

- Currently about $50K remaining
  - Emergency = sudden unanticipated event such as earthquake, fire, landslide, well collapse; no water!
  - Can fund alternative water supply
  - Cap at $250K per project
  - $10K or less, we can authorize by oral agreement

DROUGHT EMERGENCY FUNDING

Public Water System Drought Emergency Funding Program (PWSDEF):

- Senate Bill 103 (February, 2014) amending 2013 Budget Act
- $15M Available until June 30, 2016
- Initial Grant cap/Limit $500K per project
- If a project requires more that $500K additional criteria must be met

ELIGIBLE RECIPIENTS

- Community water systems
- Public water systems owned by school districts
- Must be experiencing drought related emergencies

HOW TO APPLY FOR FUNDING

- CONTACT CDPH DISTRICT OFFICE
- Requests may be submitted on continuous basis
- Priority is based on most eminent not first to apply

ELIGIBLE PROJECTS

- Projects include but are not limited to:
- Interim alternate water supplies
- Connections to adjacent water systems
- Replacement wells
- Well rehabilitation
- Temporary treatment systems
- Rented, borrowed or purchased equipment
- Design, installation and initial operation costs

PWSDEF COOPERATIVE EFFORTS

CDPH/USDA:

- CDPH and USDA are jointly working with drought affected Public Water Systems that meet eligibility requirements
- **CDPH/SOC/MCHH:**
- CDPH maintains ongoing communication with the State Operations Center / Medical and Health Coordination Center.

DROUGHT FUNDING CONTACTS and RESOURCES

- CDPH DWP Headquarters
  - Mainline: (916) 449-5600
  - Email Address: DWPFunds@CDPH.CA.GOV
- CDPH District Offices
  - Website Link to District Map/Contacts:
    http://www.cdph.ca.gov/programs/Documents/DDWEM/OriginalDistrictMapCDPH.pdf
  - CDPH Drought Webpage:
    http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DroughtPreparedness.aspx
- USDA
  - ECWAG Website Link:
    http://www.rurdev.usda.gov/IUWP-ecwag.htm
  - Household Well Water System (HWWS) Grants Website Link:
    http://www.rurdev.usda.gov/uwp-individualwellsystems.htm

Drinking Water State Revolving Fund (DWSRF)

- **A low interest loan program with limited grant funds**
  - **30% of annual federal contribution can be used for grants remainder must be committed to loans**

Drinking Water State Revolving Fund (DWSRF)

- **Fundable Projects**
  - Projects that return public water systems to compliance with primary drinking water standards
  - Public water system meter projects
  - Consolidation incentive program

Drinking Water State Revolving Fund (DWSRF)

- Eligibility:
  - A Public Water System (PWS)
  - A legal entity that owns the PWS with authority to enter into contracts and incur debt on behalf of the community to be served
  - Ranked on the Project Priority List

Drinking Water State Revolving Fund (DWSRF)

- **How projects are ranked:**
  - Ranking is based on health risk
    - 15 categories of eligible projects [A through O]
      - A - Documented waterborne disease outbreaks
      - B - Microbial contamination
      - C - Unfiltered surface water and wells with fecal contamination
      - D - Surface Water Treatment violations, including open reservoirs
      - E - Water outages (includes severe source/transmission deficit)
      - F - Nitrate contamination; chronic Total Coliform Rule violations
      - G - Distributed water exceeds chemical or radiological primary MCL
      - H – Water meters for existing unmetered service connections

Projects ranked lower than H generally are not invited to participate in the funding program.

Drinking Water State Revolving Fund (DWSRF)

- **Constraints:**
  - Must solve the problem with the most cost effective long term solution
  - Amount of grant is based on how much loan a system can afford
    - minimum water rate a system must charge = 1.5% of MHI to get grant . This is the Target Consumer Rate (TCR)
  - Funds are only for capital costs not O&M

Drinking Water State Revolving Fund (DWSRF)

- **TCR Examples:**

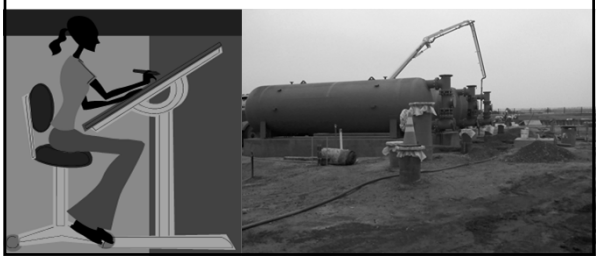
Annual MHI	TCR (monthly, water only)
$24,000	$30
$30,000	$38
$36,000	$45
$48,000	$60
$55,837	$70
$60,000	$100
$72,000	$120

Drinking Water State Revolving Fund (DWSRF)

- 2014 Interest Rate for DWSRF loans is 2.085 %
- Disadvantaged Communities eligible for 0% interest loans and grants
- Statewide MHI for 2014 is $58,504
- Disadvantaged Community: MHI < 80% Statewide MHI
- Severely Disadvantaged Community: MHI <60% Statewide MHI
- Disadvantaged Community can receive up to 80% grant
  - MHI < $46,803
- Severely Disadvantaged Community can receive up to 100% grant
  - MHI < $35,102

Drinking Water State Revolving Fund (DWSRF)

- Two types of funding
- Planning
- Construction



Drinking Water State Revolving Fund (DWSRF)

- Planning Project Funding
  - $500K max / project
  - Disadvantaged Publicly Owned & Not for Profit water systems are eligible for Grants up to $500,000
  - Must be completed within 18 months
  - 5 year loan term
    - Can take on the terms of a construction loan if construction application is submitted within 120 days of the planning project completion

Drinking Water State Revolving Fund (DWSRF)

- Construction Project Funding
  - 20 year loan term *(up to 30 years for disadvantaged communities if needed for affordability)*
  - $20M max / year / project
  - $30M max / year / entity
  - 1st claim due within 6 months from of FA execution
  - At least one claim must be submitted each quarter
  - Disadvantaged Publicly Owned & Not for Profit water systems are eligible for funding subsidies
    - grant ≤ $3 M, no interest, 30 year loan term

How to Enter the Drinking Water Program

- How to apply for DWSRF program?
  - Universal Pre-Application
    - at http://drinc.ca.gov/Preapp
    - Now continuously accepting Pre-Applications
  - Project Priority List Ranking
  - Rankings of H or higher are invited
  - Return the Statement of Intent

Drinking Water Funding Program

Main line: (916) 449-5600

1616 Capitol Ave (MS 7418)
P.O. Box 997377
Sacramento, CA 95899-7377

Email: dwpfunds@cdph.ca.gov

Website:
http://www.cdph.ca.gov/programs/Pages/DWP.aspx

Drinking Water Program Links

- Drinking Water Program District Offices
  http://www.cdph.ca.gov/programs/Documents/DDWEM/OriginalDistrictMapCDPH.pdf
- Safe Drinking Water State Revolving Fund
  http://www.cdph.ca.gov/services/funding/Pages/SRF.aspx

CFCC Workshop Notes:

RECLAMATION

Managing Water in the West

Financial Assistance Opportunities

U.S. Department of the Interior
Bureau of Reclamation

Reclamation's Mission

"Manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public."

RECLAMATION

Water Conservation Program

Mission:

- **Optimize beneficial use of water resources**
- **Educate customers about the opportunities for and the benefits of water conservation**
- **Cooperate with agencies and other stakeholders to be leaders in conservation**

RECLAMATION

Conservation Partnerships
Financial and Technical Assistance

- **Reclamation has the responsibility to help improve water management and the efficient use of water in the western United States.**
- **Funding available to irrigation districts and urban water agencies for water management improvements that accelerate the implementation of conservation activities.**

RECLAMATION

Conservation Partnerships
Financial and Technical Assistance

- **Bay-Delta Restoration Water Use Efficiency Grants**
- **WaterSMART Grants**
- **Title XVI**

RECLAMATION

Grant Partnerships

- **Public Law 111-11, Secure Water Act**
  - **Grants not to exceed 50% project's cost and no more than $5 million**
- **Grants available to States, tribes, irrigation and water districts, and other entities with water or power delivery authority**
- **Grant programs are posted on www.grants.gov**
  - **Posted for 45-90 days**
- **Awards reviewed by a technical committee and selected through a competitive process**

RECLAMATION

Water Conservation and Efficiency Grants

- **Projects funded in the past:**
  - **SCADA**
  - **Canal lining/piping**
  - **Groundwater banking**
  - **Leak detection**
  - **Irrigation retrofits**
  - **Appliance rebate programs**

RECLAMATION

San Luis Canal Company

RECLAMATION

Bay-Delta Restoration Water Use Efficiency Grants

Sacramento-San Joaquin Delta

- **Hub of CVP and SWP**
- **Provides drinking water to 2/3 of Californians**
- **750 plant and animal species**
- **Provides water to over 4 million acres of farm land**
- **Supports 80% of California's commercial fisheries**

RECLAMATION

CALFED Water Use Efficiency Grants

- **Accelerate the implementation of cost-effective actions that provide state-wide benefits through water conservation**
- **Can result in significant benefits to the Delta through water quality, water supply reliability, and instream flows**
- **To date, Reclamation has awarded 59 grants resulting in over $53 million being invested into water use efficiency projects statewide**

RECLAMATION

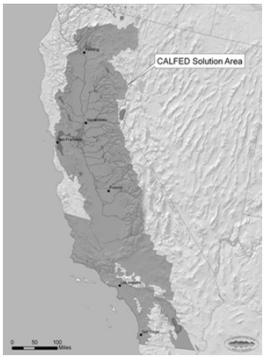
Agricultural Water Conservation and Efficiency Grants

- **Partnership with Natural Resource Conservation Service (NRCS)**
- **Eligible projects include projects that save water, improve water management, create new supplies for agricultural irrigation, improve energy efficiency, and/or benefit endangered species.**
- **Projects should also increase the capability of on-farm water conservation or water use efficiency projects that can be undertaken by farmers through irrigation system improvements.**

RECLAMATION

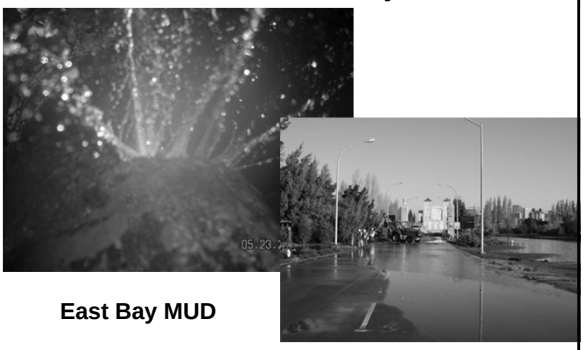
Bay-Delta Restoration Water Use Efficiency Grants

- **Eligible applicants must be located within the CALFED Solution Area**



RECLAMATION

CALFED Water Use Efficiency Grants



East Bay MUD

RECLAMATION

WaterSMART Grants

- **Competed Reclamation-wide**
  - **Water and Energy Efficiency Grants**
  - **System Optimization Reviews**
  - **Advanced Water Treatment Pilot and Demonstration Projects**
  - **Cooperative Watershed Management Program**
- **Historically, awards range from $200,000 to $1,500,000**

RECLAMATION

WaterSMART Grants Budget

- **Since 2010, over $77 million in Federal funding has been awarded to WaterSMART projects resulting in an estimated water savings of 419,000 acre-feet of water annually.**
- **Averaging over $19 million in Federal funding annually.**
- **In FY 2013, $21.4 million in Federal funding was used to fund 42 new and ongoing WaterSMART Grant projects with a combined expected water savings of 100,300 acre-feet.**

RECLAMATION

Pelger Mutual Water Company

RECLAMATION

Advanced Water Treatment Pilot and Demonstration Projects

- New to the WaterSMART Grants Program in 2010
- Accelerates the adoption and use of advanced water treatment technologies to increase water supply
- Encourages pilot and demonstration projects that address the technical, economic, and environmental viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies

RECLAMATION

Advanced Water Treatment Pilot and Demonstration Projects

Tillman Water Reclamation Plant

Hansen Spreading Grounds

Los Angeles Department of Water and Power

RECLAMATION

WaterSMART – Cooperative Watershed Management Program

- **Provides funding to watershed groups to develop local solutions to water management needs**
- **Purpose:**
  - **Improve water quality and ecological resilience**
  - **Conserve water**
  - **Reduce conflicts**

Title XVI Water Reclamation and Reuse Program

Reclamation partners with non-federal agencies to:

- **Identify and investigate opportunities to reclaim and reuse wastewaters and naturally impaired ground and surface waters**
- **Conduct research for reclamation and reuse, and**
- **Fund planning studies and construction activities**

RECLAMATION

Title XVI Program

- **Title XVI construction funding is provided to projects specifically authorized by Congress and undertaken by local government entities.**
- **Through Title XVI over $520 million in Federal cost-share has been leveraged with more than $1.7 billion in non-federal funding since 1992.**
- **For more information, contact David White, dwhite@usbr.gov, 916-978-5074.**

RECLAMATION

Thank you

WaterShare

www.usbr.gov/mp/watershare

Funding Opportunity Announcements
Previously Funded Projects
Performance Measures
Newsletter
Water Management Planning Tools

RECLAMATION

CFCC Workshop Notes:

State of California
Department of Water Resources

Grant Programs

2014 CFCC Funding Fair

General Obligation Bonds

- Prop 84 - Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006
- Prop 1E - Disaster Preparedness and Flood Protection Bond Act of 2006
- Prop 50 - Water Security, Clean Drinking Water, Coastal, and Beach Protection Act of 2002
- Prop 204 - Safe, Clean, Reliable Water Supply Act of 1996
- Prop 13 - The Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection Bond of 2000
- Prop 81 – California Safe Drinking Water Bond Law of 1988

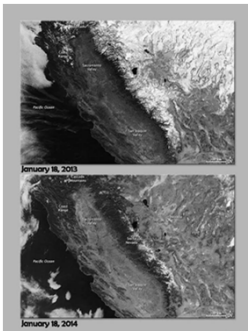
2

Eligible Applicants

- Local public agencies (CWC §10535)
  - Cities
  - Counties
  - Special districts (Reclamation Districts, Flood Control Districts, etc.)
  - Joint powers authorities
  - Political subdivisions of the State
  - Public utilities (Section 216 of Public Utilities Code)
  - Mutual water companies (Section 2725 of Public Utilities Code)
- Additional eligible applicants noted on slides

3

2014 Integrated Water Management Drought Solicitation



Additional Eligible Applicants

- Federally recognized Native American Tribes

Prop 84

- $200 million

4

2014 Integrated Water Management Drought Solicitation

Eligible Projects

- Drought preparedness
- Local water supply reliability
- Delivery of safe drinking water
- Conservation program implementation and measures
- Reduce water quality or ecosystem conflicts

5

2014 Integrated Water Management Drought Solicitation

Application period is June – July.

www.water.ca.gov/irwm/grants/implementation.cfm

6

Safe Drinking Water - Contaminant Removal Technologies

Eligible Applicants

- Public water systems
- Public entities

Eligible Projects

- Test new technologies for contaminant removal
- Disinfection using ultraviolet and ozone treatment

7

Safe Drinking Water - Contaminant Removal Technologies

Prop 50 Funding

- $10 million
- 25% of funds for Disadvantaged Communities
- 50% cost share
- No match required for DACs or small water systems
- Grant cap of $5 million

Continuous solicitation based on available funds.

www.water.ca.gov/grantsloans/grants/prop50sdw.cfm

8

Safe Drinking Water Bond Law of 1988

Eligible Applicants

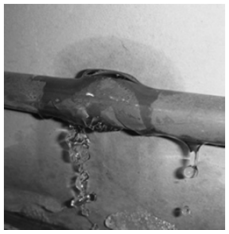
- Public and private water systems

Prop 81 Funding

- Approximately $6 million
- Grants and loans available

9

Safe Drinking Water Bond Law of 1988



Eligible Projects

- Improve drinking water so it is pure, wholesome, and drinkable
- Leak detection
- Repair programs

10

Safe Drinking Water Bond Law of 1988

- Continuous solicitation based on available funds.

Jeremy Callihan, Program Analyst
(916) 653-4763
Jeremy.Callihan@water.ca.gov

11

Delta and Sacramento/San Joaquin Rivers Water Quality Programs – Group II

Additional Eligible Applicants

- Other entities may collaborate with local agency

12

Delta and Sacramento/ San Joaquin Rivers Water Quality Program – Group II

Eligible Projects

- Reduce salinity or other pollutants
- Located at Delta agricultural and drinking water intakes
- Provide public benefit

13

Delta and Sacramento/ San Joaquin Rivers Water Quality Programs – Group II

Prop 84 Funding

- $36.6 million available
- $20 million per grant cap

Proposal Solicitation Package release in summer 2014.

http://baydeltaoffice.water.ca.gov/sdb/prop84/index_prop84.cfm

14

Drainage Reuse Program

Objectives

- Improve on-farm drainage management and reuse
- Harvest salts from drainage water

15

Drainage Reuse Program

Eligible Projects

- Reuse subsurface agricultural drainage water
- Drainage source reduction
- Salt tolerant plant species
- Market opportunities for harvested salt
- Drainage treatment and separation technologies

16

Drainage Reuse Program

Prop 84 Funding

- Approximately $1.6 million

Proposal Solicitation Package release in spring 2014.

www.water.ca.gov/drainage/

17

Delta and Sacramento/ San Joaquin Rivers Water Quality Program – Group III

Objectives

- Improvement/protection of drinking water supplies
- Reduce or eliminate discharges of subsurface agricultural drainage
- West side of San Joaquin Valley

18

Delta and Sacramento/ San Joaquin Rivers Water Quality Program – Group III

Eligible Projects

- Salinity reduction
- Collection, reuse or treatment systems
- Eliminate drainage to San Joaquin River
- Improve water quality in legal Delta, San Joaquin and Sacramento rivers

19

Delta and Sacramento/ San Joaquin Rivers Water Quality Programs – Group III

Prop 84 Funding

- $ 36.6 million available
- $ 18.3 million per grant cap
- 10 – 50% cost share

Proposal Solicitation Package release in summer 2014.

www.water.ca.gov/drainage/

20

Urban Streams Restoration

Objectives

- Reduce flooding or erosion
- Improve ecological values of streams
- Promote stewardship

21

Urban Streams Restoration

Eligible Projects

- Creek cleanups
- Eradication of exotic or invasive plants
- Revegetation efforts
- Channel reconfiguration for natural functions
- Flood management parcel acquisition
- Coordination of community involvement

22

Urban Streams Restoration

Prop 84 and 13 Funding

- $ 8 million available
- Grant cap of $1 million

Eligible Applicants

- Local public agency with citizens group or non-profit

Application period expected in fall 2014.

www.water.ca.gov/urbanstreams/

23

Flood Corridor Program

Objectives

- Flood risk reduction through non-structural projects
- Habitat restoration/ conservation and/or agricultural land preservation
- Restore natural floodplain processes

24

Flood Corridor Program

Eligible Projects

- Acquisition or easements
- Preserving agriculture
- Restoration of habitat

25

Flood Corridor Program

Additional Eligible Applicants

- Non-profits
- CA Native American Tribes

Funding

- Grant cap of $5 million
- $15 million available in Prop 1E, 13, and 84
- New solicitation expected in fall 2014

www.water.ca.gov/floodmgmt/fpo/sgb/fpcp

26

Flood Control Subventions Program

Eligible Projects

- Implementation of flood control projects
- Outside the Central Valley
- U.S. Army Corps of Engineers
- Natural Resources Conservation Service

27

Flood Control Subventions Program

Prop 84 & 1E Funding

- 50%-70% reimbursement
- Continuous reimbursement

www.water.ca.gov/floodmgmt/fpo/sgb/fcs

28

Flood Emergency Response Program

Eligible Applicants

- Responsibility for flood emergency response and coordination

Future Solicitations

- Legal Delta - Proposition 1E
- Statewide - Proposition 84
- $5 million grant cap
- Competitive grants with no local match

29

Flood Emergency Response Program

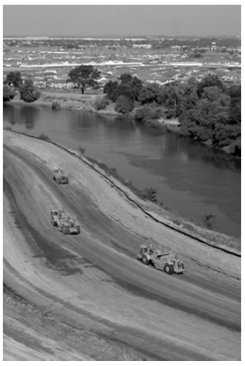
Eligible Projects

- Local emergency plan
- Flood emergency planning and preparedness
- Communication & coordination response process
- Flood information exchange
- Emergency communication equipment

www.water.ca.gov/floodmgmt/hafoo/fob/floodER

30

Urban Flood Risk Reduction Program



Eligible Projects

- Levee Repair
- Levee Improvement
- Part of the State Plan of Flood Control
- In the Sacramento-San Joaquin Delta
- Protect a Central Valley urban area

31

Urban Flood Risk Reduction Program

Prop 1E Funding

- $55 million available

Guidelines and Proposal Solicitation Package due summer 2014.

www.water.ca.gov/floodsafe/

32

Local Levee Assistance Program

Eligible Projects

- Local Levee Evaluations
- Local Levee Critical Repairs
- NOT part of the State Plan of Flood Control
- Outside the Sacramento-San Joaquin Delta
- Protect a non urban area

33

Local Levee Assistance Program

Local Levee Evaluations

- State Cost-Share Cap: $2 million per project
- Prop 84 funds
- Field surveys and geotechnical investigations
- Hydrology and hydraulic analyses
- Lab testing and feasibility studies
- Environmental permitting and CEQA compliance costs

34

Local Levee Assistance Program

Local Levee Critical Repair

- State Cost-Share Cap: $5 million per project
- Prop 84 funds
- Design, improvement and repair of damaged levees
  - Independent Peer Review
  - Environmental permitting and CEQA compliance costs

Application period in summer 2014.

www.water.ca.gov/floodmgmt/fpo/sgb/llap

35

Delta Levees Program – Special Flood Control Projects

Eligible Projects

- Flood protection improvement and habitat restoration projects in the Delta
  - Assembly Bill 360

36

Delta Levees Program – Special Flood Control Projects

Prop 1E & 84 Funding

- $75 million

Proposal Solicitation Package due in May 2014.

www.water.ca.gov/floodsafe/fessro/levees/special_projects/

37

Delta Levees Program – Delta Levee Subventions

Eligible Projects

- Delta Levee System maintenance projects
  - CALFED Record of Decision (2000)
  - Assembly Bill 360

38

Delta Levees Program – Delta Levee Subventions

Prop 84 & 1E Funding

- Up to 75% State reimbursement for eligible costs

Application period in June 2014.

www.water.ca.gov/floodsafe/fessro/levees/subventions/

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Additional Information

DWR Website

- **www.water.ca.gov** (Select Issues then All Funding Topics)

Bond Accountability Website

- **www.bondaccountability.ca.gov**

40

Questions?

Leslie Pierce, Program Manager II
- (916) 651-9251
- Leslie.Pierce@water.ca.gov

Kristyne Van Skike, Research Program Specialist
- (916) 651-0728
- Kristyne.VanSkike@water.ca.gov

CFCC Workshop Notes:

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Please Note: All Department of Water Resources (DWR) Funding Programs are listed at the end of the Water Programs table because their list of funding programs is substantially longer than those of the other agencies.										
Safe Drinking Water State Revolving Fund (SDWSRF)	California Department of Public Health	Loans Grants	Provide low interest loans or grants to assist public water systems in achieving or maintaining compliance with the Safe Drinking Water Act (SDWA)	Must be a public water system Project must be needed to comply with the SDWA Project must be on CDPH's project priority list System must meet technical, managerial, and financial requirements All applications are for loans; financial review determines if grant funds apply	CEQA Some projects CEQA/ NEPA	Water treatment facilities, replace aging infrastructure, planning studies, consolidation of water systems, source water protection, etc.	Dams or rehab of dams, O&M costs, lab fees for monitoring, projects mainly for fire protection or future growth, etc.	$500,000 per planning study $20 million per project and $30 million per entity per cap grant Call program for grant limitations	Pre-application Invited annually Loan: Interest rate is ½ the general obligation rate 2014 program rate is 2.085%, paid back over 20 years. The rate changes every January Disadvantaged system may obtain a zero interest loan Disadvantaged public and mutual systems may receive partial grant funding	Technical Contact: Dat Tran (916)449-5644 Financial Contact: Joshua Ziese (916) 445-9501
Webpage: http://www.cdph.ca.gov/services/funding/Pages/SRF.aspx										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Infrastructure State Revolving Fund (ISRF) Program	California Infrastructure and Economic Development Bank (I-Bank)	Loan	Provide financing for construction and/or repair of publicly owned water supply, treatment and distribution systems, and drainage, and flood control facilities	Applicant may be any subdivision of a local or state government. Applicant may also be a company, corporation, association, partnership, firm, or other entity or group of entities organized as a public benefit not-for-profit entity engaged in business or operations within the state. Certain projects may require such entities to apply in conjunction with a Sponsor. Project must promote economic development and attracts, creates, and sustains long-term employment opportunities.	N/A	Construct and/or repair water collection, supply, and treatment systems, including equipment Acquire land in conjunction with such project	Subject to review: · Privately owned infrastructure Debt refinancing	$50,000 to $25 million	The interest rate benchmark is Thompson's Municipal Market Data Index. Staff may adjust the interest rate based upon factors that include: · Unemployment, · Medium Household Income, · Environmental, · Other special circumstances The I-Bank Board has final approval of the interest rate. Maximum 30 year term Open application process	Ruben Rojas (916) 327-2029 Diane Cummings (916) 324-4805
Webpage: http://ibank.ca.gov/infrastructure_loans.htm										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Community Development Block Grant (CDBG) Program	State Department of Housing and Community Development	Grants to City and County Jurisdictions	Project must principally benefit low income persons/households. For example: do water system upgrades for residents of communities with over 51% of its residents being low income or extend water service to a site for a business that creates jobs for low income persons	Cities or counties that are not under HUD's CDBG entitlement program Jurisdictions can pay for improvements to their own system or give the funds to private or public water providers	NEPA/ CEQA	Pay for project feasibility study, final plans and specs, site acquisition and construction, and grant administration costs Pay for repair or new construction of town's water tank Pay for one-time assessment fees for low income families Pay for installation of private laterals and hook up fees for low income families under our Housing Rehabilitation activity	Maintenance costs Refinancing of existing debt Inquire regarding special restrictions for Native American and Colonia funding	Each CDBG Allocation sets funding award limits In their annual NOFA (Typically up to $1,500,000) Six Types of Activities: 1-Community Development, 2-Economic Development Enterprise Fund, 3-Economic Development Over the Counter, 4- Native American, 5-Colonia and 6-Planning and Technical Assistance	Notices of Funding Availability (NOFAs) scheduled for release in January each year Jurisdiction sets type of financing and terms (grants vs. loans)	Thomas Brandeberry (916) 263-1328 thomas.brandeberry@hcd.ca.gov
Webpage: http://www.hcd.ca.gov/fa/cdbg/index.html										
Cleanup and Abatement Account (CAA) $2 million for interim replacement drinking water** **Note: The State Water Board may re-consider funding restrictions this summer to allow for more flexibility.	State Water Resources Control Board	Grant	In October 2012, the State Water Board set aside $2 million in CAA funding to provide interim replacement drinking water to severely disadvantaged communities with contaminated water supply.	- Must be a public water system that serves a severely disadvantaged community - Water supply is affected by a waste (anthropogenic). - Project must be on CDPH's project priority list - System must meet technical, managerial, and financial requirements	CEQA	Water supply must be impacted by anthropogenic (man-made) waste		$50,000 per public water system or $30 per month per service connection	Continuous; funds available through January 31, 2015 (to be encumbered)	Conny Mitterhofer (916) 341-5720
Webpages: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/caa/										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Cleanup and Abatement Account (CAA) $4 million for interim replacement drinking water	State Water Resources Control Board	Grant	Provide interim emergency drinking water to disadvantaged communities with a contaminated water supply exacerbated by drought conditions.	Public Agencies Not-for-Profit Water Districts Not-for-Profit Organizations Tribal Governments	CEQA	- Bottled Water - Vending Machines - Point of Use Devices - Hauled Water - Wellhead Treatment Planning Water supply must be contaminated		There are no minimum or maximum specified funding limits. Although the total funding shall not exceed $4 million.	Continuous; funds are available through June 30, 2015 (to be encumbered)	Conny Mitterhofer (916) 341-5720
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/caa/dw_droughtfund/index.shtml										
Clean Water State Revolving Fund Program, Expanded Use	State Water Resources Control Board	Financing	Provide funding for nonpoint source and estuary projects	Public Agencies and nonprofit organizations	CEQA +	Stormwater treatment and diversion, sediment and erosion control, stream restoration, land acquisition, septic system replacement, agricultural drainage	Operations and maintenance costs, legal fees.	None	Interest rate is one-half general obligation bond rate. Repayment term of 30 year.	Conny Mitterhofer 916-341-5720
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml										
Clean Beaches Initiative (CBI) Grant Program	State Water Resources Control Board	Grant	Projects that restore and protect water quality of coastal waters, estuaries, bays, and near shore waters, with an emphasis on projects that reduce bacterial contamination on public beaches.	Public Agencies Local Agencies Non-profits Indian Tribes	CEQA	Planning and implementation projects meeting CBI priorities	Operation and maintenance activities	$150K to $5M Requires match (variable based on project or if benefits a disadvantaged community).	Continuous funding cycle, with intermittent closures to review proposals, until funds are exhausted. Applications through FAAST.	Patricia Leary (916) 341-5167
Webpage: http://www.waterboards.ca.gov/water_issues/programs/beaches/cbi_projects/index.shtml										
319(h) Non-point Source Grant Program	State Water Resources Control Board	Grant	Projects to control non-point source pollution consistent with Total Maximum Daily Loads, or those under development	Public Agencies Local Agencies Non-profits Indian Tribes	CEQA	Planning and implementation projects meeting Regional Water Quality Control Board preferences	Operation and maintenance activities Projects that include activities required under a National Pollutant Discharge Elimination System (NPDES) permit	$4.5 million total, with $75K to $125 K per planning project, and $250K to $750K per implementation project. Requires 25% match unless disadvantaged.	Annual solicitation, with applications through FAAST.	Patricia Leary (916) 341-5167
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/319h/index.shtml										
Areas of Special Biological Significance (ASBS) Grant Program	State Water Resources Control Board	Grant	Projects to assist Dischargers to ASBS's to comply with the Special Protections in the Ocean Plan	various	CEQA	Implementation Projects (Revised Guidelines under development)	Operation and maintenance activities	TBD	TBD (anticipated for summer 2014)	Patricia Leary (916) 341-5167
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/asbs/index.shtml										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
WaterSMART: Water and Energy Efficiency Grants	US Bureau of Reclamation	Grant	The objective of this Funding Opportunity Announcement (FOA) is to invite States, Indian Tribes, irrigation districts, water districts and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on projects that seek to conserve and use water more efficiently, increase the use of renewable energy and improve energy efficiency, benefit endangered and threatened species, facilitate water markets, or carry out other activities to address climate-related impacts on water or prevent any water-related crisis or conflict. Water conservation, use of water markets, and improved efficiency are crucial elements of any plan to address western U.S. water issues. With leveraged water and energy efficiency grants, an important step will be taken towards increasing conservation for a more efficient use of water in the West.	Under P.L. 111-11, Section 9502, an eligible applicant is a State, Indian tribe, irrigation district, water district, or other organization with water or power delivery authority located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended. Applicants must be willing to cost share 50 percent or more of the total project costs.	NEPA	Projects should seek to conserve and use water more efficiently, increase the use of renewable energy, protect endangered and threatened species, facilitate water markets, or carry out other activities to address climate-related impacts on water or prevent any water-related crisis or conflict.	Projects that are considered normal operations, maintenance, and replacement (OM&R) are not eligible. OM&R is described as system improvements that replace or repair existing infrastructure or function without providing increased efficiency or effectiveness of water distribution over the expected life of the improvement. Any projects or project elements that are part of a congressionally authorized Title XVI project of Public Law 102-575, as amended (43 U.S.C. 390h et seq.), are not eligible for funding under this FOA. A project that proposes using Federal funding for purchasing water is not eligible under this FOA. A project that proposes to construct a building is not eligible for Federal funding under this FOA (e.g., a building to house administrative staff or to promote public awareness of water conservation).	Funding will be awarded at one of two levels: **Funding Group I:** Up to $300,000 per agreement for a project up to 2 years. **Funding Group II:** Up to $1,500,000 for an agreement for up to 3 years for a small number of projects.	FOA expected on grants.gov in the Fall.	Dean Marrone (303) 445-3577
Webpage: http://www.usbr.gov/WaterSMART										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
WaterSMART: Advanced Water Treatment Pilot and Demonstration Projects	US Bureau of Reclamation	Grant	The objective of this FOA is to invite States, Indian Tribes, irrigation districts, water districts, and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on pilot and demonstration projects to accelerate the adoption and use of AWT technologies in order to increase water supply and provide for long term water sustainability. Projects funded under this FOA will include pilot and demonstration projects that will address the technical, economic, and environmental viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale	Under P.L. 111-11, Section 9502, an eligible applicant is a State, Indian tribe, irrigation district, water district, or other organization with water or power delivery authority located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended. Applicants must be willing to cost share 50 percent or more of the total project costs.	NEPA	Emphasis will be directed toward applications for pilot and demonstration projects that address the technical and economic viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale.	Funding is not available for the construction of a full-scale plant under this opportunity. Projects that are considered normal operations, maintenance, and replacement (OM&R) are not eligible. OM&R is described as system improvements that replace or repair existing infrastructure or function without providing increased efficiency or effectiveness of water distribution over the expected life of the improvement. Any projects or project elements that are part of a congressionally authorized Title XVI project of Public Law 102-575, as amended (43 U.S.C. 390h et seq.), are not eligible for funding under this FOA.	Applicants may seek project awards of up to $600,000 per agreement.	FOA expected on grants.gov in the Fall.	Dean Marrone (303) 445-3577
Webpage: http://www.usbr.gov/WaterSMART										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
WaterSMART: Grants to Develop Climate Analysis Tools	US Bureau of Reclamation	Grant	The objective of this Funding Opportunity Announcement (FOA) is to invite universities, non-profit research institutions, and organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on activities designed to enhance the management of water resources, including developing tools to assess the impacts of climate change on water resources.	In accordance with P.L. 111-11, Section 9504(b)(1) of the Secure Water Act, eligible applicants include any university located in the United States; non-profit research institution located in the United States; or organization with water or power delivery authority located in the western United States or Territories (as identified in the Reclamation Act of June 17, 1902, as amended and supplemented. Applicants must be willing to cost share 50 percent or more of the total project costs	NEPA	Projects should seek to develop knowledge, information, and tools that will lead to enhanced long-term water resources planning in the Western United States with respect to future climate. Proposed projects are expected to deliver new capabilities that address information gaps detailed in the joint Reclamation and United Stated Army Corps of Engineers (USACE) Report titled *Addressing Climate Change in Long-Term Water Resources Planning and Management: User Needs for Improving Tools and Information*, Section 3, Table 1.		Applicants may seek project awards of up to $200,000 per agreement.	FOA expected on grants.gov in the Winter.	Dean Marrone (303) 445-3577
Webpage: http://www.usbr.gov/WaterSMART										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
WaterSMART: System Optimization Review Grants	US Bureau of Reclamation	Grant	The objective of this Funding Opportunity Announcement (FOA) is to invite States, Indian tribes, irrigation districts, water districts, and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation to assess the potential for water management improvements and identify specific ways to implement those improvements. System Operation Reviews (SOR) consist of: (1) An assessment of the potential for water management improvements in a system or district and (2) A report identifying specific improvements to increase efficiency, including a plan of action for implementing the recommendations	Under P.L. 111-11, Section 9502, an eligible applicant is a State, Indian tribe, irrigation district, water district, or other organization with water or power delivery authority located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended. Applicants must be willing to cost share 50 percent or more of the total project costs	NEPA	Grants will be awarded to SOR projects that can produce a completed final report, including plans of action to secure water through water conservation, efficiency, and markets SORs are intended to focus on improving efficiency throughout a system, district, river basin, or a portion thereof—not on a single structure such as improving one headgate or lining one ditch. SORs are intended to take a broad look at system-wide efficiency, and they are not focused on single project-specific planning.	SOR funding may not be applied to the cost of design, engineering, or construction of a particular recommended project. Funding for the design, engineering, or construction of a project may be available under a separate FOA for Water and Energy Efficiency grants.	Applicants may seek project awards of up to $300,000 per agreement.	FOA expected on grants.gov in the Fall.	Dean Marrone (303) 445-3577
Webpage: http://www.usbr.gov/WaterSMART										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Bay Delta Restoration Water Use Efficiency (BDWUE) Grants: Agricultural Water Conservation and Efficiency Grants	US Bureau of Reclamation /NRCS	Grant	Program focused on the restoration of the Delta's fragile ecosystem while improving water supply reliability for agricultural water users. Accelerate the implementation of cost-effective actions that provide state-wide benefits through water conservation.	In accordance with Public Law 111-11, any eligible applicants are State, Indian tribe, irrigation district, water districts, or other organization with water or power delivery authority. Applicants must also be located in the CALFED solution area as identified in the 1999 CALFED Programmatic Environmental Impact Statement/ Environmental Impact Report.	NEPA	Projects should seek to conserve and use water more efficiently, and result in quantifiable and sustained water savings or improve water management.	Projects that are considered normal operations, maintenance, and replacement (OM&R) are not eligible. Any projects or project elements that are part of a Congressionally authorized Title XVI Water Recycling and Reuse project of Public Law 102-575, as amended (43 U.S.C. 390h et seq.), are not eligible for funding under this program.	Reclamation's share of any one proposed project shall not exceed $300,000 or 50 percent of the total project costs. Multiple applications from one entity for different projects may be submitted for consideration under this FOA. In addition, applicants may apply for funding of projects eligible under the other BDRWUE FOA. *However, no more than $1,000,000 in FY 2012 BDRWUE Grant funding will be awarded to any one entity.*	FOA expected on grants.gov in the Fall.	Gene Lee (916) 978-5219
Webpage: www.usbr.gov/mp/watershare/index.html										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Bay Delta Restoration Water Use Efficiency (BDWUE) Grants: CALFED Water Use Efficiency Grant Program	US Bureau of Reclamation	Grant	The objective of the CALFED grant program is to promote the goals/objectives and missions of CALFED. These goals (objectives) include but are not limited to: Goal 1: Reduce existing irrecoverable losses, increasing the overall volume of available water; Goal 2: Achieve multiple state-wide benefits; Goal 3: Preserve local flexibility; and Goal 4: Build on existing water use efficiency programs.	In accordance with Public Law 111-11, any eligible applicants are State, Indian tribe, irrigation district, water districts, or other organization with water or power delivery authority. Applicants must also be located in the CALFED solution area as identified in the 1999 CALFED Programmatic Environmental Impact Statement/ Environmental Impact Report.	NEPA	The CALFED Water Use Efficiency Grant Program will fund urban and agricultural projects. Proposals may include any type of implementation, demonstration, or pilot water use efficiency or conservation projects that have benefits to the California Bay-Delta.	Projects that only consist of research or feasibility studies, planning or education will not be funded. Water recycling projects are not eligible for funding under this program.	Reclamation's share of any one proposed project shall not exceed $500,000 or 50 percent of the total project costs. Multiple applications from one entity for different projects may be submitted for consideration under this FOA. In addition, applicants may apply for funding of projects eligible under the other BDRWUE FOA. *However, no more than $1,000,000 in FY 2012 BDRWUE Grant funding will be awarded to any one entity.*	FOA expected on grants.gov in the Fall.	Angela Anderson (916) 978-5215
Webpage: www.usbr.gov/mp/watershare/index.html										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
WaterSMART: Cooperative Water Management Program (CWMP) Grants	US Bureau of Reclamation	Grant	The purpose is to improve water quality and ecological resilience and to reduce conflicts over water through collaborative conservation efforts in the management of local watersheds. The primary goal is to address two major concerns synonymous with watershed groups – 1) the need for funding to pay the salary of a full-time coordinator and 2) the limited funding available for project management.	Please visit the following website for more information: http://www.usbr.gov/ WaterSMART/cwmp/	NEPA	The CWMP will provide financial assistance to form new watershed groups, to expand existing watershed groups, and/or to conduct one or more projects in accordance with the goals of watershed groups. Priority may be given to watershed groups that represent a maximum diversity of interests, serve sub basin-sized watersheds with an 8-digit hydrological unit code, as defined by USGS.	Please visit the following website for evaluation criteria: http://www.usbr.gov/WaterSMART/cwmp/docs/ CWMPEvaluationCriteria.pdf	Phase I funds shall be used to establish or enlarge a watershed group, to develop a mission statement for the watershed group, to develop project concepts, and to develop a restoration plan. Phase II funds shall be used to plan and carry out watershed management projects. Phase III funds shall be used to plan and carry out at least one watershed management project.	$100,000 to first-phase grant recipients for a period of not more than 3 years. The Federal share of expenditures accrued in first phase grant activities shall be funded 100%. Phase II and III grants shall not exceed 50% of the total cost of the activities.	Lee Mao (916) 978-5202
Webpage: http://www.usbr.gov/WaterSMART/cwmp/										
Water and Waste Disposal program	USDA Rural Development	Loan/ Grant	Provide loans and grants to develop and rehabilitate community water systems	Public bodies, Tribes, Nonprofits ,Cities, Towns and census designated places with populations less than 10,000	NEPA/ CEQA	Funds may be used for costs associated with planning, design, and construction of new or existing systems Eligible projects include storage, distribution, source development	Facilities not modest in size, design, and cost For profit systems	None, but average project size is $3-5 million	Loans: 2.-4.% fixed, 40 years Grant funding available to reduce user costs Continuous filing	Dave Hartwell USDA State Office (530) 792-5817
Water and Waste Disposal Colonias Grant	USDA Rural Development	Grant	Help especially needy communities within 150 miles of the Mexico Border. Pay for all or part of the costs to provide safe drinking water facilities for the residents	Designated "Colonias" within 150 miles of US- Mexico Border	NEPA/ CEQA	Residents to be served must face significant health risks due to the fact that a significant proportion of the community's residents do not have access to, or are not served by, adequate, affordable, water disposal systems	Facilities not modest in size, design, and cost For profit systems	Average project grant $1 million	100% grant, subject to availability Continuous filing	Dave Hartwell USDA State Office (530) 792-5817

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Water and Waste Disposal	USDA Rural Development	USDA guarantees loans made by banks	Provide additional security for commercial lenders that finance community water, systems	Banks and other commercial lenders are eligible applicants Cities, Towns, Public bodies ,census designated place, with populations less than 10,000	NEPA/ CEQA	Funds may be for costs associated with Planning, design, and construction of new or existing systems Eligible projects include water, storage, distribution, and source development	Facilities not modest in size, design, and cost Privately owned infrastructure	None	Negotiated between business and lender Fixed and variable rates allowed Continuous filing	Dave Hartwell USDA State Office (530) 792-5817
Webpage: http://www.rurdev.usda.gov/ca										
Emergency Community Water Assistance Grant	USDA – Rural Development	Grant	Help eligible rural communities recover from an emergency that result in a decline in capacity to provide safe, reliable drinking water for households and businesses.	Rural areas with populations less than 10,000 population.	NEPA	Construction of new water source, intake,treatment facility,waterline extensions.	Repairs to infrastructure that was not damaged by an emergency.	$500,000	Funds need to be obligated by June 30, 2014.	North State Dave Hartwell (530) 792-5817 South State Pete Yribarren (559)734-8732 ext. 108
Rural Energy for America Program	USDA – Rural Development	Grants and loan guarantees	To provide assistance for energy audits and renewable energy development	Must be either an agriculture producer or rural small business. Units of State, tribal or local government; land-grant colleges, universities.	NEPA	Commercially available technologies. Limited to: Bio-energy from Biomass, including anaerobic digester; Geothermal, elect generation, Hydrogen, Solar, photovoltaic and thermal; Wind; Micro-hydro; Ocean; E85 and Biodiesel Blender Pumps.	Research and Development, demonstration projects, provision of power to residents.	Renewable Energy Systems (RES) and Energy Efficiency Improvement (EEI) grants cover 25% of project cost, not to exceed $500,000 for RES and $250,000 for EEI projects. Loan Guarantees up to $25 million. Feasibility Study grants up to $50,000. EA/REDA grants max $100,000.	RES, EEI and feasibility study Grants require 75% match. Loan Guarantee between 60 and 80% of loan.	Steven Nichols (530) 792-5805
Webpage: http://www.rurdev.usda.gov/BCP_ReapEaReda.html										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 1E Urban Flood Risk Reduction Program	Department of Water Resources	Bond Financing	Levee repair projects and levee improvement projects	Eligible applicants are local public agencies or a Joint Powers Authority with the authority to implement flood management projects.	CEQA	Project must be 1) part of the State Plan of Flood Control, 2) located in the Sacramento-San Joaquin Delta and 3) protecting an urban area (pop. > 10,000) in Central Valley	Projects that are not part of the State Plan of Flood Control and are not in the Sacramento-San Joaquin Delta. Check website for State Plan of Flood Control information http://www.water.ca.gov/cvfmp/docs/SPFCDescriptiveDocumentNov2010.pdf	Approx. $55 million available	Guidelines due summer 2014.	Kelly Fucciolo (916) 574-0918
Webpage: http://www.water.ca.gov/floodsafe/										
Propositions 1E and 84 Flood Emergency Response Program	Department of Water Resources	Grant	To improve local flood emergency response	Public agencies with primary responsibility for Flood Emergency Response & Coordination, Counties & Cities, Reclamation Districts, Flood Control Districts, Local Maintaining Agencies California Native American Tribes are eligible if they meet the above requirements.	Some projects may need CEQA	Preparing or updating local emergency plan; Coordinating flood emergency planning and preparedness (including training & exercise); Developing communication & coordination response process; Collecting & exchange of flood information; Purchase & installing equipment for interoperable emergency communication; See guidelines for complete list	Projects not included in guidelines.	$5 million for Delta for Prop 1E. $5 million for Statewide (outside Delta) for Prop 84.	Two solicitations based on geography: 1) Statewide (Outside legal Delta -Proposition 84) and 2) Legal Delta (Proposition 1E) Competitive grants with no local match.	Pat Clark (916) 574-1249
Webpage: http://www.water.ca.gov/floodmgmt/hafoo/fob/floodER										
Propositions 1E and 84 Flood Control Subventions Program	Department of Water Resources	Grant (Claims Reimb.)	Implementation of federally-authorized flood control projects (minor or major) and Watershed Protection Flood Prevention Projects	Local public agencies	CEQA/ NEPA	Major flood control projects authorized by Congress; small flood control projects authorized by PL 80-858 and the U.S. Army Chief of Engineers; and watershed protection projects, which include projects authorized by the Administrator of the Natural Resources Conservation Service	Flood control projects without federal authorization	Variable state cost-share percentage based on multi-purpose objectives for projects, ranging from a minimum of 50% to a maximum of 70%	Claim submittals accepted on continuous basis Claims paid based on available State funding	Nahideh Madankar (916) 574-1459
Webpage: http://www.water.ca.gov/floodsafe										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 50 (Chapter 6, Section 79545(a)) Desalination Program	Department of Water Resources	Grant	Development of local water supplies through brackish water and sea water desalination	Local agencies, California Native American Tribes, non-profit organizations, universities/colleges, state agencies, Federal agencies	CEQA	Brackish groundwater or seawater projects, including construction for implementation, feasibility studies, pilot or demonstration projects, and research projects		Up to $8.7 million is available.	Application period in November 2013 – January 31, 2014.	Rich Mills (916) 651-0715
Webpage: http://www.water.ca.gov/desalination/2014DesalGrants.cfm										
Proposition 50 (Chapter 6 Section 79545(b)) Pilot and Demonstration Projects for Contaminant Removal Technologies	Department of Water Resources	Grant	Pilot and Demonstration Projects for Contaminant Removal Technologies	Eligible applicants are public water systems and California Native American Tribes under the regulatory jurisdiction of CDPH and other public entities	CEQA	Pilot and demonstration projects for contaminants such as: • Petroleum products, Nitrosodimethylamine, • Perchlorate; • Radionuclides, • Pesticides, • Herbicides, • Heavy metals, Pharmaceuticals, and Endocrine disrupters	A Proven/Existing contaminant removal technology method. (Studies must use new technologies) Grant Funds cannot be used for the operation and maintenance after pilot study is complete.	Up to $5 million per grant Non-State cost share required. Designated funds are being held for Disadvantaged Communities No match required for disadvantaged communities or small water systems (public water system serving less than or equal to 1,000 service connections or less than or equal to 3,300 population)	Continuous solicitation.	Steve Giambrone (916) 653-9722
Webpage: http://www.water.ca.gov/grantsloans/grants/prop50sdw.cfm										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 50 (Chapter 6 Section 79545(c)) Ultraviolet and Ozone Treatment	Department of Water Resources	Grant	Drinking water disinfecting projects using Ultra Violet technology and ozone treatment	Eligible applicants are public water systems and California Native American Tribes under the regulatory jurisdiction of CDPH and other public entities	CEQA	Systems that have a maximum contaminant level compliance violation, surface water treatment microbial requirements, or mandatory disinfection required by the CDPH or local agency Systems must demonstrate the ability to operate and maintain treatment facility Ozone projects must be designed to minimize residual byproducts	Projects that do not meet technical, managerial, and financial capacity requirements.	Up to $5 million per grant Non-State cost share required Designated funds are being held for Disadvantaged Communities No match required for disadvantaged communities or small water systems	Continuous solicitation.	Steve Giambrone (916) 653-9722
Webpage: http://www.water.ca.gov/grantsloans/grants/prop50sdw.cfm										
Prop 81 - California Safe Drinking Water Bond Law of 1988	Department of Water Resources	Grant/Loan	Projects that help meet the Safe Drinking Water Standards.	Private Systems: Any person, partnership, corporation, association, California Native American Tribe, or other entity or political subdivision of the state which owns or operates a domestic water system. Public Agencies: Any city, county, city and county, district, joint powers authority, or other political subdivision of the state which owns or operates a domestic water system.		Planning projects that investigate and identify alternatives for system improvements. Eligible projects will be those which improve the applicant's drinking water to make sure it is pure, wholesome, and drinkable. These improvements may include, but need not be limited to, leak detection and repair programs	Please contact program staff for project eligibility.	Please contact program staff for funding limits.	Ongoing application cycle	Linda Ng (916) 653-9634 Jeremy Callihan (916) 653-4763

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 84 Delta and San Joaquin and Sacramento Rivers Water Quality Grant Program	Department of Water Resources	Grant	Water quality improvement projects	Local agencies Other entities, including universities and non-profit organizations, may collaborate with a local agency to perform work with the grant funds	CEQA	Eligible projects include those at Franks Tract and other Delta projects that reduce salinity or other pollutants at agricultural and drinking water intakes.	Projects that do not show direct protection of drinking water supplies	$20 million	$36.6 million available. Final Guidelines and first proposal solicitation package released in July, 2010. Proposal solicitation package anticipated June 2014. Check	Genevieve Schrader (916) 653-2118
Webpage: http://baydeltaoffice.water.ca.gov/sdb/prop84/index_prop84.cfm										
Proposition 84 Delta and San Joaquin and Sacramento Rivers Water Quality Grant Program	Department of Water Resources	Grant	Provide improvement/ protection of drinking water supplies Group III: Reduce or eliminate discharges of subsurface agricultural drainage water from the west side of the San Joaquin Valley	Local agencies Other entities, including universities and non-profit organizations, may collaborate with a local agency to perform work with the grant funds Geographic: Projects that improve the water quality in the legal Delta, San Joaquin River, and the Sacramento River	CEQA	Salinity reduction projects of subsurface agricultural drainage water from the west side San Joaquin Valley. Collection, reuse, or treatment systems to eliminate drainage to San Joaquin River from west side irrigators.	Projects that do not directly protect drinking water supplies or that do not meet geographic requirements.	$18.3 million per eligible project 10% to 50% minimum cost share required; may include federal, state, or local funds, or donated services.	$36.6 million available Guidelines released in July 2010. Updated guidelines and proposal solicitation package for Group III anticipated Summer 2014.	Jose Faria (559) 230-3339
Webpage: http://www.water.ca.gov/drainage/										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 84 Delta Levee Subventions, 75033 (Delta Levees Program)	Department of Water Resources	Grant (Claims Reimb.)	Maintain and rehabilitate non-project and eligible project levees in the Delta	Local levee maintaining agencies and Reclamation Districts Levees not part of the State-Federal Flood Control System Levees located within the Delta California Native American Tribes are eligible if they are an agency or political subdivision of the State which is authorized to maintain levees (CA Water Code Section 12980(c).	CEQA	Delta Levee System maintenance projects that meet goals of the California Water Code Sections 12980 – 12995.	Projects that do not meet requirements for environmental mitigation (AB 360) and agricultural irrigation or drainage projects	Up to 75% State reimbursement for eligible costs, pursuant to executed funding agreement	Claim submittals accepted on annual basis, pursuant to executed funding agreement. Claims paid based on available State funding Next application period is June 2014.	Sandi Maxwell (916) 651-7009 or Andrea Lobato (916) 651-9295
Webpage: http://www.water.ca.gov/floodsafe/fessro/										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 84 (Chapter 2, §75026) Integrated Regional Water Management (IRWM)	Department of Water Resources	Grant	Award funds for Implementation of projects consistent with IRWM Plans to assist local public agencies to meet long-term water management needs of the State, including the delivery of safe drinking water, flood risk reduction, and protection of water quality and the environment.	Applicant must be a local public agency or nonprofit representing an accepted IRWM Region. Other IRWM partners may access funds through their own agreements with the applicant/grantee	CEQA	Projects that implement IRWM Plans	Operation and maintenance activities .	Bond funding allocation for entire program is $1 billion. Prop 84 allots grant funding to 11 funding areas. Guidelines contain information on how potential funding of multiple IRWM efforts within a funding area will occur and maximum grant amount per funding area. Guidelines have been combined with Prop 1E SWFM funding. Each Proposal Solicitation Package will have specified amount of funds available.	In January, 2014, DWR released the Plan Review Process, an addendum to the 2012 IRWM Program Guidelines. Round 3 grant solicitation for $472.5 million is expected in Fall/Winter 2014.	Zaffar Eusuff (916) 651-9266
Webpage: www.water.ca.gov/irwm/grants/										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 84 Local Levee Assistance Program	Department of Water Resources	Grant	Local Levee Evaluation Projects (LOLE) - Evaluate levees or other flood control structures Local Levee Critical Repair Projects (LLCR) – Design, repair and improve damaged levees or other flood control structures	Local public agencies Levees or other flood control structures that are not part of the State Plan of Flood Control Levees or other flood control structures located outside of the Sacramento-San Joaquin Delta Levees or other flood control structures that protect a non-urban area (pop. < 10,000) in the Central Valley California Native American Tribes may be eligible if they are a local public agency or Joint Powers Authority responsible for the local levee and qualified to contract with the State.	CEQA	LOLE - Evaluation of levees or other flood control structures; field surveys, geotechnical investigations, hydrology and hydraulic analysis, feasibility studies, environmental documentation and reporting LLCR – Design, repair or improvement of levees or other flood control structures; costs for environmental permits and CEQA compliance, and costs of conducting independent peer reviews	LOLE - Evaluation of levees or other flood control structures that are part of the State Plan of Flood Control for the Central Valley or located within the Sacramento-San Joaquin Delta LLCR – Design, repair or improvement of levees or other flood control structures that are part of the State Plan of Flood Control for the Central Valley or located within the Sacramento-San Joaquin Delta	LOLE - $2 million per applicant; LLCR - $5 million per applicant	Guidelines released in 2011. Application period in early 2014.	David Wright (916) 574-1191
Webpage: http://www.water.ca.gov/floodmgmt/fpo/sgb/llap/										
Proposition 84 Special Flood Control Projects 75033 (Delta Levees Program)	Department of Water Resources	Grant (Claims Reimb.)	Improvement and enhancement of the Delta levee system and habitat restoration in the Delta	Local levee maintaining agencies and Reclamation Districts Projects located within the Delta California Native American Tribes are eligible if they are a public agency responsible for the maintenance of a non-project levee or a project levee in the Delta. (CA. Water Code Section 12310(a))	CEQA	Flood protection improvement projects and habitat restoration in the Delta	Projects that do not meet requirements for environmental mitigation (AB 360) and agricultural irrigation or drainage projects	Up to 100% State reimbursement for eligible costs, pursuant to executed funding agreement	New solicitation package may be released in early 2014. Claim submittals accepted on monthly basis based on project expenditures, with executed funding agreement	Jon Wright (916) 651-7010 or Andrea Lobato (916) 651-9295
Webpage: http://www.water.ca.gov/floodsafe/fessro/levees/special_projects/										

WATER PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Proposition 84 & Proposition 13 Urban Streams Restoration Program	Department of Water Resources	Grant	Reduce urban flooding and erosion, restore environmental values, and promote stewardship of urban streams	Local government agencies and citizens groups/nonprofits (together) California Native American Tribes may apply for grant funding if they are registered as a non-profit organization, or they can partner with a local agency or nonprofit.	CEQA	Examples include creek cleanups; eradication of exotic or invasive plants; revegetation efforts; bioengineering bank stabilization projects; channel reconfiguration to improve stream geomorphology and aquatic habitat functions; acquisition of parcels critical for flood management; and coordination of community involvement in projects.	Include, but not limited to, exclusively educational or fish and wildlife enhancement projects; lake or reservoir enhancements; planning only projects; and mitigation for development or other projects	$1 million per eligible project	Next grant application solicitation anticipated in summer or fall 2014.	Amy Young (916) 651-9626
Webpage: http://www.water.ca.gov/urbanstreams/										
Propositions 1E, 84 and 13 Flood Corridor Program	Department of Water Resources	Grant	Flood risk reduction through non-structural projects that include wildlife habitat enhancement and/or agricultural land preservation components	Local public agencies or nonprofit/citizens groups California Native American Tribes are eligible if registered as non-profit or if partnering with local public agencies or nonprofit/citizens groups.	CEQA	Funding acquisition of real property or easements in a floodplain from willing sellers; preserving or enhancing flood-compatible agricultural use; restoration of habitat compatible with seasonal flooding; and related activities	Flood protection projects that do not include wildlife habitat enhancement or agricultural land preservation benefits	$5 million per eligible project. 10% non-State, non-federal cost share required; may be reduced to 5% or no-cost share if serving disadvantaged or severely disadvantaged community	New solicitation package will be released July – October 2014.	David Wright (916) 574-1191
Webpage: http://www.water.ca.gov/floodmgmt/fpo/sgb/fpcp/										
Proposition 204 Drainage Reuse Program	Department of Water Resources	Grant	Improve on-farm drainage management and reuse techniques, and develop technologies to feasibly and economically harvest salts from drainage water	Public agencies are eligible.	CEQA	Research and technical study projects that: develop methods to reuse subsurface agricultural drainage water; develop drainage source reduction opportunities; utilize and/or develop salt-tolerant plant species; determine market opportunities for harvested salts; and develop drainage treatment and salt separation/utilization technologies		$300,000 per eligible project	Guidelines and Proposal Solicitation Package will be released in Spring 2014. Applications due Spring/Summer 2014.	Jose Faria (559) 230-3339
Webpage: www.water.ca.gov/drainage/										

WASTEWATER & WATER RECYCLING PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Infrastructure State Revolving Fund (ISRF) Program	California Infrastructure and Economic Development Bank (I-Bank)	Loan	Provide financing for construction and/or repair of publicly owned wastewater collection and treatment systems	Applicant may be any subdivision of a local or state government. Applicant may also be a company, corporation, association, partnership, firm, or other entity or group of entities organized as a public benefit not-for-profit entity engaged in business or operations within the state. Certain projects may require such entities to apply in conjunction with a Sponsor. Project must promote economic development and attracts, creates, and sustains long-term employment opportunities.	N/A	Construct and/or repair collection system and treatment facilities, including equipment Acquire land in conjunction with such project	Subject to review: · Privately owned infrastructure · Debt refinancing	$50,000 to $25 million	The interest rate benchmark is Thompson's Municipal Market Data Index. Staff may adjust the interest rate based upon factors that include: · Unemployment, · Medium Household Income, · Environmental, · Other special circumstances The I-Bank Board has final approval of the interest rate. Maximum 30 year term Open application process	Ruben Rojas (916) 327-2029 Diane Cummings (916) 324-4805
Webpage: http://ibank.ca.gov/infrastructure_loans.htm										
Community Development Block Grant (CDBG) Program	State Department of Housing and Community Development	Grants to City and County Jurisdictions	Project must "principally" benefit low income persons/households For example: Make upgrades to a sewage collection and treatment system for residents of a community with over 51% of its residents being low income	Cities or counties that are not under HUD's CDBG entitlement program Jurisdictions can pay for their own system or give the funds to private or public systems	NEPA/ CEQA	Pay for project feasibility study, final plans and specs, site acquisition and construction, and grant administration costs Rehabilitate or construct sewer/water lines or sewer lift station Pay for one-time assessment fees for low income families Pay for installation of private laterals and hook up fees for low income families under our Housing Rehabilitation activity	Maintenance costs Refinancing existing debt	Each CDBG Allocation sets Funding award limits In their annual NOFA (Typically $1,500,000) Six Types of Activities: 1-Community Development, 2-Economic Development Enterprise Fund, 3-Economic Development Over the Counter, 4- Native American, 5-Colonia and 6-Planning and Technical Assistance	Notices of Funding Availability (NOFAs) scheduled for release January each year. Jurisdiction sets type of financing and terms (grants vs. loans)	Thomas Brandeberry (916) 263-1328
Webpage: http://www.hcd.ca.gov/fa/cdbg/index.html										

WASTEWATER & WATER RECYCLING PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Clean Water State Revolving Fund (CWSRF) Program: Wastewater Treatment Projects	State Water Resources Control Board	Financing* *Limited amount of principal forgiveness/ grants available to disadvantaged communities	Provide low interest financing for wastewater treatment facilities	Municipality	CEQA+	Collection and treatment facilities or systems including eligible reserve capacity, process control systems, onsite solids handling; allowance costs (planning, design, construction management); and mitigation measures mandated by state and/or federal agencies.	Land, O&M, change orders, decorative items, construction or improvements on private property	None	Interest rate is ½ of the latest general obligation bond rate (may be reduced to as low as 0% for certain SDACs) Repayment term of up to 30 years	Bob Pontureri (916) 341-5828 Small Disadvantaged Community Wastewater Projects: Meghan Tosney (916) 341-5729
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml										
Water Recycling Funding through the CWSRF Program	State Water Resources Control Board	Financing	Provide funding for water recycling projects	Municipal wastewater reclamation only	CEQA+	Construction of water recycling distribution, storage, pumping, treatment and groundwater recharge facilities	Including but not limited to: Land, easements, O&M, , decorative items, improvements on private property, all other items that are not part of the construction contract (except allowances)	None	Interest rate is ½ of the general obligation bond Repayment term of up to 30 years	Dan Newton (916) 324-8404
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml										
Water Recycling Funding Program – Construction Loan Program	State Water Resources Control Board	Financing* *Limited funds available as accumulated from Prop. 13 loan repayments.	Provide funding for water recycling projects	Municipal wastewater reclamation, and local groundwater reclamation (contamination due to human activity)	CEQA	Construction of water recycling distribution, storage, pumping , treatment and groundwater recharge facilities.	, Including but not limited to: Land, easements, O&M, decorative items , on-site retrofits, all other items that are not part of the construction contract (except allowances)	None	Continuous application process Interest rate is ½ of the general obligation bond Repayment term of 20years	Dan Newton (916) 324-8404
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/index.shtml										

WASTEWATER & WATER RECYCLING PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Water Recycling Funding Program – Facilities Planning Grant Program	State Water Resources Control Board	Grant	Funding for facilities planning studies to determine the feasibility of using recycled water to offset the use of fresh/potable water from state and/or local supplies.	Only public agencies are eligible to receive a facilities planning grant.	Not Applicable	Preparation of a complete facilities planning report (stamped and signed by a licensed California engineer), including a market assessment, alternative analysis, development of user assurances and preparation of a construction financing plan.	Pollution control studies, in which water recycling is an alternative, are not eligible.	50 percent of eligible costs up to $75,000.	Continuous Application Process.	Dan Newton (916) 324-8404
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/index.shtml										
Water Recycling Funding Program – Construction Grant Program	State Water Resources Control Board	Grant* *Very limited funds available as accumulated from Prop. 13 loan repayments and Prop. 50 appropriations.	Provide funding for water recycling projects	Municipal wastewater reclamation, and local groundwater reclamation (contamination due to human activity)	CEQA	Construction of water recycling distribution, storage, pumping , treatment and groundwater recharge facilities.	Including but not limited to: Planning costs, land, easements, O&M, legal costs, on-site retrofits, contingencies	Construction grants are limited to 25 percent of the eligible construction cost or $4 million whichever is less. Funding is limited.	Continuous Application Process. Must be on Competitive Project List (CPL)	Dan Newton (916) 324-8404
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/index.shtml										
Seawater Intrusion Control Loan Program	State Water Resources Control Board	Financing	Provide construction loans to projects that prevent the destruction of groundwater quality due to seawater intrusion.	City, county, district, joint powers authority, or other political subdivision of the state involved in water management.	CEQA	Eligible projects may include, but are not limited to, water conservation, freshwater well injection, and substitution of groundwater pumping from local surface supplies. Construction of distribution, storage, pumping, injection wells and treatment facilities.	O&M, legal costs, land, change orders and claims	Eligible projects funded on a first-come-first-served basis. The date of the Division's approval of a complete application will determine the order.	Interest rate is ½ of the general obligation bond Repayment term of 20 years	Dan Newton (916) 324-8404
Webpage: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/swic.shtml										

WASTEWATER & WATER RECYCLING PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Water and Waste Disposal	USDA Rural Development	Loan/ Grant	Provide financing for , wastewater, solid waste and storm drainage systems both new and existing projects	Public bodies, tribes, nonprofits, Cities and Towns and census designated places with populations less than 10,000	NEPA/ CEQA	Funds may be used for costs associated with planning, design, and construction of new or existing systems Eligible projects include treatment, collection, storm drainage	Facilities not modest in size, design, and cost For profit systems	None, but average project size $3-5 million	Loans: fixed 2.- 4.% 40 years Grant funding available to reduce user costs Continuous filing	Dave Hartwell USDA State Office (530) 792-5817
Water and Waste Disposal Colonias Grant	USDA Rural Development	Grant	Provide funding to help especially needy communities near the US-Mexico Border pay for all or part of the costs to provide waste disposal and storm drain facilities	Eligible applicants are designated "Colonias" within 150 miles of US-Mexico Border Cities, Towns, Public bodies, census designated place ,with populations less than 10,000	NEPA/ CEQA	Residents to be served must face significant health risks due to the fact that a significant proportion of the community's residents do not have access to, or are not served by, adequate, waste disposal	Facilities not modest in size, design, and cost For profit systems	Average project grant $1 million	100% grant, subject to availability Continuous filing	Dave Hartwell USDA State Office (530) 792-5817
Water and Waste Disposal	USDA Rural Development	USDA guarantees loans made by banks	Provide additional security for commercial lenders that finance wastewater, storm drainage, and solid waste systems	Banks and other commercial lenders are eligible applicants Cities, Towns, Public bodies, census designated place, with populations less than 10,000	NEPA/ CEQA	Funds may be for costs associated with planning, design, and construction of new or existing systems Eligible projects include treatment, collection, and storm drainage	Facilities not modest in size, design, and cost For profit systems	None	Negotiated between business and lender Fixed and variable rates allowed Continuous filing	Dave Hartwell USDA State Office (530) 792-5817

Webpage: http://www.rurdev.usda.gov/ca

WASTEWATER & WATER RECYCLING PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Rural Energy for America Program	USDA – Rural Development	Grants and loan guarantees	To provide assistance for energy audits and renewable energy development	Must be either an agriculture producer or rural small business. Units of state, tribal or local government; land-grant colleges, universities.	NEPA	Commercially available technologies. Limited to: Bio-energy from Biomass, including anaerobic digester; Geothermal; elect generation; Hydrogen, Solar, Photovoltaic and Thermal; Wind: Micro-hydro; Ocean; E85 and Biodiesel Blender Pumps.	Research and Development, demonstration projects, provision of power to residents.	Renewable Energy Systems (RES) and Energy Efficiency Improvement (EEI) and feasibility study grants require 75% match. Loan Guarantee between 60 and 80% of loan. Application for Loan Guarantees up to $25 million. Feasibility Study grants up to $50,000. EA/REDA grants max$100,000.	RES, EEI and feasibility study grants require 75% match. Loan Guarantee between 60 and 80% of loan.	Steven Nichols (530) 792-5805
Webpage: http://www.rurdev.usda.gov/BCP_ReapEaReda.html										
WaterSMART: Title XVI Water Reclamation and Reuse Program	US Bureau of Reclamation	Grants and Cooperative Agreements	Provide Federal funding for the study or construction of projects that reclaim and reuse municipal, industrial, domestic or agricultural wastewater and naturally impaired ground or surface waters.	No requirements for studies. Project-specific construction authorization is required to receive Federal funds for construction	NEPA	Reclaimed water can be used for a variety of purposes such as environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, or recreation.	None	The maximum Federal cost share for studies is 50% and for construction is the lesser of $20 million or 25% of the total project costs.	None	David White (916) 978-5074
Webpage: http://www.usbr.gov/WaterSMART/title/										

ROADWAY PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Infrastructure State Revolving Fund (ISRF) Program	California Infrastructure and Economic Development Bank (I-Bank	Loan	Provide financing for public infrastructure projects such as city streets, county and state highways	Applicant may be any subdivision of a local or state government. Applicant may also be a company, corporation, association, partnership, firm, or other entity or group of entities organized as a public benefit not-for-profit entity engaged in business or operations within the state. Certain projects may require such entities to apply in conjunction with a Sponsor. Project must promote economic development and attracts, creates, and sustains long-term employment opportunities.	N/A	Construct or repair public roadway Acquire land in conjunction with such project	Subject to review: · Privately owned infrastructure · Debt refinancing	$50,000 to $25 million	The interest rate benchmark is Thompson's Municipal Market Data Index. Staff may adjust the interest rate based upon factors that include: · Unemployment, · Medium Household Income, · Environmental, · Other special circumstances The I-Bank Board has final approval of the interest rate. Maximum 30 year term Open application process	Ruben Rojas (916) 327-2029 Diane Cummings (916) 324-4805
Webpage: http://ibank.ca.gov/infrastructure_loans.htm										
Community Development Block Grant (CDBG) Program	State Department of Housing and Community Development	Grants to City and County Jurisdictions	Project must "principally" benefit low income persons/households For example: Install new roads or curbs, gutters, and sidewalk, or new street drainage system for residents of a community with over 51% of its residents being low income.	Cities or counties that are not under HUD's CDBG entitlement program	NEPA/ CEQA	Pay for project feasibility study, final plans and specs, site acquisition and construction, and grant administration costs Must be rehabilitation or a new road and can include installing street lights, landscaping, and sidewalks Potentially: Assist families to install sidewalks in front of their home	Maintenance costs	Each CDBG Allocation sets funding award limits in Their annual NOFA (Typically $1,500,000) Six Types of Activities: 1-Community Development, 2-Economic Development Enterprise Fund, 3-Economic Development Over the Counter, 4- Native American, 5-Colonia and 6-Planning and Technical Assistance	Notices of Funding Availability (NOFAs) scheduled for release January each year. Jurisdiction sets type of financing and terms (grants vs. loans)	Thomas Brandeberry (916) 263-1328 thomas.brandeberry@hcd.ca.gov
Webpage: http://www.hcd.ca.gov/fa/cdbg/index.html										

ROADWAY PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Community Facility (CF) Direct Loan	USDA Rural Development	Loan	Finance new construction or repair	Cities, Towns, Nonprofits and Unincorporated areas with less than 20,000 Population	NEPA	Construct or repair public roadways	Private roads	$20 million per project per year	Loans: 3-5% 40 year maximum term Continuous filing	Anita Lopez (530) 792-5822

COMMUNITY FACILITY PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Infrastructure State Revolving Fund (ISRF) Program	California Infrastructure and Economic Development Bank (I-Bank)	Loan	Provide financing for public infrastructure projects such as educational facilities (libraries, child care, day care, employment training facilities, laboratories, administration centers, student service buildings, athletic complexes, and public parking facilities); parks and recreational facilities, equipment, parkways, and property); and public safety facilities (police stations, fire stations, court buildings, jails, juvenile halls, juvenile detention facilities)	Applicant may be any subdivision of a local or state government. Applicant may also be a company, corporation, association, partnership, firm, or other entity or group of entities organized as a public benefit not-for-profit entity engaged in business or operations within the state. Certain projects may require such entities to apply in conjunction with a Sponsor. Project must promote economic development and attracts, creates, and sustains long-term employment opportunities.	N/A	Construct or acquire a facility Acquire land, in conjunction with such project	Subject to review: · Privately owned infrastructure · Debt refinancing	$50,000 to $25 million	The interest rate benchmark is Thompson's Municipal Market Data Index. Staff may adjust the interest rate based upon factors that include: · Unemployment, · Medium Household Income, · Environmental, · Other special circumstances The I-Bank Board has final approval of the interest rate. Maximum 30 year term Open application process	Ruben Rojas (916) 327-2029 Diane Cummings (916) 324-4805
Webpage: http://ibank.ca.gov/infrastructure_loans.htm										
Community Development Block Grant (CDBG) Program	State Department of Housing and Community Development	Grants to City and County Jurisdictions	Project must "principally" benefit low income persons/households For example: create a facility for homeless services or a healthcare facility in a community where at least 51% of residents are low income; or create/expand a public facility that creates jobs for low income persons	Cities or counties that are not under HUD's CDBG entitlement program Jurisdictions can pay for their own community facilities or give the funds to other government agencies or private or non profit agencies	NEPA/ CEQA	Pay for project feasibility study, final plans and specs, site acquisition and construction costs (new construction or rehabilitation costs), and grant administration. Types of facilities: fire and police stations, homeless and battered family shelters, day care centers for seniors or kids, social service and health care facilities, teen centers, job training and business incubators.	Refinancing existing debt Buildings for general use by local government To be eligible, Public Facilities must provide HUD-eligible Public Services. Contact CDBG for additional information.	Each CDBG Allocation sets funding award limits in their annual NOFA (Typically up to $1,500,000) Six Types of Activities: 1-Community Development, 2-Economic Development Enterprise Fund, 3-Economic Development Over the Counter, 4- Native American, 5-Colonia and 6-Planning and Technical Assistance	Notices of Funding Availability (NOFAs) released each year, scheduled for every January. Jurisdiction sets type of financing and terms (grants vs. loans)	Thomas Brandeberry (916) 263-1328 thomas.brandeberry@hcd.ca.gov
Webpage: http://www.hcd.ca.gov/fa/cdbg/index.html										

COMMUNITY FACILITY PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Community Facility (CF) Guarantee	USDA Rural Development	Loan Guarantee	Offer loan Guarantees To Lenders to help Build community facilities	Banks and other commercial lenders make loans to nonprofits & tribes in Communities with < 20,000 in population	NEPA	The loans guaranteed can be used for real estate and equipment (e.g. clinics, child care, fire stations, public buildings)	Golf Courses	$100,000 - $20 million	Negotiated between borrower and lender Fixed and variable rates Continuous filing	Pete Yribarren South (559) 734-8732 x108 Anita Lopez North (530)792-5822
Community Facility (CF) Direct Loan	USDA Rural Development	Loan	Develop essential community facilities	In Cities and Towns of <20,000 in population to public bodies, non profits and tribes	NEPA	The loans can be used for real estate and equipment (e.g. clinics, child care, fire stations, public buildings)	Recreation	$100,000 - No Maximum	Loans: 3.55.% (rates subject to change) 40 years maximum term Continuous filing	Pete Yribarren South (559) 734-8732 x108 Anita Lopez North (530)792-5822
Community Facility (CF) Grant	USDA Rural Development	Grant	To help communities that cannot qualify for a CF loan	In Cities and Towns of <20,000 in population to public bodies, non profits and tribes	NEPA	The grants can be used for equipment (e.g. clinics, child care, fire stations, public buildings)	Recreation; feasibility studies, operating expenses	Average $20,000	Continuous filing	Pete Yribarren South (559) 734-8732x108 Anita Lopez North (530)792-5822

OTHER INFRASTRUCTURE PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Infrastructure State Revolving Fund (ISRF) Program	California Infrastructure and Economic Development Bank (I-Bank)	Loan	Provide financing for public infrastructure projects such as: • environmental mitigation • port facilities • power and communications transmission or distribution facilities • public transit • solid waste collection and disposal • defense conversion • military infrastructure	Applicant may be any subdivision of a local or state government. Applicant may also be a company, corporation, association, partnership, firm, or other entity or group of entities organized as a public benefit not-for-profit entity engaged in business or operations within the state. Certain projects may require such entities to apply in conjunction with a Sponsor. Project must promote economic development and attracts, creates, and sustains long-term employment opportunities.	N/A	Construct or modify: • educational, cultural, and social facilities • public infrastructure, purchase and install pollution control or noise abatement equipment • parks and recreation facilities • docks, harbors, piers, marinas • facilities for and/or transmission or distribution of electrical energy, natural gas, and telecommunication • air and rail transport of goods, including parking facilities • transfer stations, recycling centers, sanitary landfills, waste conversion and recycling facilities • facilities for successfully converting military bases • facilities on or near a military installation that enhance military operations acquire land in conjunction with such project	Subject to review: · Privately owned infrastructure · Debt refinancing	$50,000 to $25 million	The interest rate benchmark is Thompson's Municipal Market Data Index. Staff may adjust the interest rate based upon factors that include: · Unemployment , · Medium Household Income, · Environmental, · Other special circumstances The I-Bank Board has final approval of the interest rate. Maximum 30 year term Open application process	Ruben Rojas (916) 327-2029 Diane Cummings (916) 324-4805
Webpage: http://ibank.ca.gov/infrastructure_loans.htm										

OTHER INFRASTRUCTURE PROGRAMS

Program	Department	Type	Purpose	Eligibility Requirements	CEQA/ NEPA	Eligible Uses	Ineligible Uses	Funding Limits	Terms/Dates	Contact
Community Development Block Grant (CDBG) Program	State Department of Housing and Community Development	Grants to City and County Jurisdictions	Project must "principally" benefit low income persons/households For example: create or improve a park in a community where at least 51% of residents are low income. Upgrade public access to a facility for ADA compliance	Cities or counties that are not under HUD's CDBG entitlement program Jurisdictions can fund their own facilities or pass funds through to special districts or agencies	NEPA/ CEQA	Pay for project feasibility study, final plans and specs, site acquisition and construction, and grant administration costs of parks Installation of ADA improvements in public facilities	Maintenance costs Refinancing existing debt Building of general use by local government	Each CDBG Allocation sets funding award limits in Their annual NOFA (Typically $1,500,000) Six Types of Activities: 1-Community Development, 2-Economic Development Enterprise Fund, 3-Economic Development Over the Counter, 4- Native American, 5-Colonia and 6-Planning and Technical Assistance	Notices of Funding Availability (NOFAs) scheduled for release January each year. Jurisdiction sets type of financing and terms (grants vs. loans)	Thomas Brandeberry (916) 263-1328 thomas.brandeberry@hcd.ca.gov
Webpage: http://www.hcd.ca.gov/fa/cdbg/index.html										

CFCC Workshop Notes:

CALIFORNIA FINANCING COORDINATING COMMITTEE (CFCC)

COMMON FUNDING INQUIRY FORM

Instructions: *An electronic copy of this form can be obtained at: www.cfcc.ca.gov*

Please provide the information below and e-mail the completed form to: ibank@ibank.ca.gov

If completing a hard copy of this form, attach responses where applicable and fax to (916) 322-6314.

Name of Applicant or Official System Name: | **County**:

Check the box that best describes the applicant's organization:

☐ Municipal entity ☐ Private entity, for profit ☐ Private entity, nonprofit

Project OR problem description. Describe the problem or the need for the project, the purpose of the project, the basic design features of the project and what the project will accomplish. (Attach documentation, if available)

_____

Estimated Project Schedule. Provide a timeline that illustrates the estimated start and completion dates for each major phase or milestone of project development, construction and/or acquisition (including, for example, feasibility study, land acquisition, preliminary engineering, environmental review, final design and construction commencement and completion).

_____

Financing is needed for (check all that apply):

☐ Feasibility Study ☐ Rate Study ☐ Engineering/Architectural
☐ Land Acquisition ☐ Project Construction and Administration
☐ Other, specify:_____

Estimated Total Project Costs $ **Estimated amount of funding requested** $

Multiple funding sources anticipated: ☐Yes ☐ No

For water/sewer projects only:

System ID No.: _____

Service Area Population: _____
Number of Service Connections: _____
Estimated Median Household Income of service area: $_____

How did you hear about the California Financing Coordinating Committee?

_____

All correspondence regarding this inquiry will be sent to the individual named below. You will receive a written acknowledgement of the receipt of this inquiry form and be contacted by staff of the appropriate CFCC member agencies to pursue additional assistance.

Printed Name of Inquirer Title

Mailing Address (street) City/State Zip code

( ) ( )
Phone Number FAX Number e-mail

For CFCC Use Only: *Date of Referral to CFCC Member Agencies:* *Date Responded to Applicant Inquiry:*

CFCC Workshop Notes:

ACRONYMS AND ABBREVIATIONS

1940-1 – Documentation used to set aside funds for a project
306C – Colonias Grant Program (for projects near the Mexican border)
306C – Tribal Grant (for federally recognized tribes)
501(c)(3*)* – Nonprofit entity meeting certain Internal Revenue Service tax requirements

AB – Assembly Bill
AB 32 – California Assembly Bill 32 that is major piece of climate change legislation
AF – Acre Feet
AWT – Advanced Water Treatment
ACS – American Community Survey

CALFED – CALFED Bay-Delta Program; 25 state and federal agencies comprise CALFED
CalWep – California Water and Energy Program
CARE – Community Action for a Renewed Environment (USEPA)
Cat Ex – Categorical Exclusion
CBI – Clean Beaches Initiative
CDBG – Community Development Block Grant
CDPH – California Department of Public Health
CEQA – California Environmental Quality Act
CF – Community Facilities
CFCC – California Financing Coordinating Committee
CIEDB – California Infrastructure and Economic Development Bank (I-Bank)
CVP – Central Valley Project
CPL – Competitive Project List
CWSRF – Clean Water State Revolving Fund (State Water Board)

DAC – Disadvantaged Community
DBE – Disadvantaged Business Enterprises
DFA – Division of Financial Assistance
DRIP – Desalination Research Innovation Partnership
DSCR – Debt Service Coverage Ratio
DWR – Department of Water Resources

EA – Environmental Assessment
ED – Economic Development
EEF – Economic Enterprise Fund (CDBG)
EF – Enterprise Fund
EIS/EIR – Environmental Impact Statement/Environmental Impact Report
EPA – Environmental Protection Agency
ER – Environmental Report
ERU – Environmental Review Unit

FAAST – Financial Assistance Application Submittal Tool (State Water Board)
FOA – Funding Opportunity Announcement
FY – Fiscal Year

GHG – Greenhouse Gas Emissions
G/NA – General Program/Native American Allocation (CDBG)

GO – General Obligation (Bonds)

HCD – State of California, Department of Housing and Community Development
HUD – United States Department of Housing and Urban Development

I-Bank – California Infrastructure and Economic Development Bank
IDB – Industrial Development Bond
IRWM – Integrated Regional Water Management
ISRF – Infrastructure State Revolving Fund (I-Bank)
IUP – Intended Use Plan

kWh – Kilowatt Hours

LGA – Local Groundwater Assistance
LOC – Letter of Commitment
LTIG – Low Target Income Group (50% of the County's median income)

MADS – Maximum Annual Debt Service
MCL – Maximum Contaminant Level
MHI – Median Household Income

NEPA – National Environmental Policy Act
NOAA – Notice of Acceptance of Application (funding offer)
NOFA – Notice of Funding Availability
NPDES – National Pollutant Discharge Elimination System
NPS – Nonpoint Source
NRCS – Natural Resources Conservation Service

O&M – Operations and Maintenance
OM&R – Operations, Maintenance, and Replacement
OTC – Over-the-Counter (CDBG Economic Development Grant)
OWR – Office of Water Recycling

PCA – Potential Contaminating Area
PER – Preliminary Engineering Report
PF – Principal Forgiveness
PI – Program Income
PL – Public Law
PPL – Project Priority List
PROP – Proposition
PSP – Proposal Solicitation Package
PTA – Planning/Technical Assistance Grant (CDBG)
PUC – Public Utilities Commission

RBS – Rural Business Service (USDA)
RD – Rural Development (USDA)
R&D – Research and Development
RHS – Rural Housing Service (USDA)
RO – Reverse Osmosis

RRA – Reclamation Reform Act of 1982 (USBR)
RUS – Rural Utilities Service (USDA)

SB – Senate Bill
SCADA – Supervisory Control and Data Acquisition
SCG – Small Community Grant (State Water Board)
SDAC – Small and/or Disadvantaged Community (State Water Board)
SDWSRF – Safe Drinking Water State Revolving Fund (CDPH)
SF – Standard Form (USDA)
SI – Sustainable Infrastructure
SOR – System Optimization Review
SWGP – Stormwater Grant Program
SWP – State Water Project
SWPP – Source Water Protection Program
State Water Board – State Water Resources Control Board

TA – Technical Assistance
TCR – Target Consumer Rate
TIG – Target Income Group (80% of County median income)
TMF – Technical, Managerial, and Financial Capacity

UCC – Uniform Commercial Code
USBR – United States Bureau of Reclamation
USDA – United States Department of Agriculture
USEPA – United States Environmental Protection Agency
USTCF – Underground Storage Tank Cleanup Fund

WDR – Waste Discharge Requirements
WEP – Water and Environmental Programs
WRFP – Water Recycling Funding Program
WUE – Water Use Efficiency
WWD – Water and Waste Disposal Loan and Grant Program
W/WW – Water and Wastewater

NO COST

2014 CFCC Funding Fairs

Please join the California Financing Coordinating Committee (CFCC) for this no-cost event.

2014 SCHEDULE

May 28, 2014
Cal/EPA Headquarters
Coastal Hearing Room
1001 "I" Street
Sacramento, CA 95814

August 20, 2014
Shasta/Redding Library
110 Parkview Ave
Redding, CA 96001

September 9, 2014
Fresno State University
North Gym, Room 118
5241 North Maple Ave
Fresno, CA 93740

September 11, 2014
San Luis Obispo City County Library
995 Palm Street
San Luis Obispo, CA 93401

September 23, 2014
Kern County Health Department
1800 Mt Vernon Ave
Bakersfield, CA 93306

September 25, 2014
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572

October 9, 2014
Cal/EPA Headquarters
Coastal Hearing Room
1001 "I" Street
Sacramento, CA 95814
The Sacramento workshop will be webcast. Access to the webcast will be available online at: http://www.calepa.ca.gov/broadcast.

CFCC agencies fund the following types of eligible infrastructure projects including:

- Drinking water
- Wastewater
- Water quality
- Water supply
- Water conservation
- Solid waste
- Energy efficiency
- Flood management
- Streets and highways
- Emergency response vehicles
- Water use efficiency
- Community facilities

AGENDA

At each location, the Funding Fair Agenda is as follows:
Check in: 8 a.m.-8:30 a.m.
Agency Presentations: 8:30 a.m.-Noon
Discuss your projects: Noon-3 p.m.

ATTENDEE REGISTRATION

Go to www.cfcc.ca.gov and click on **Funding Fairs**
Funding Fair Questions?
Please call (916) 447-9832 x 1029

For more information, please visit our web site at: www.cfcc.ca.gov

California Financing Coordinating Committee

2014 Funding Fair Partners

CFCC is pleased to acknowledge and thank the Rural Community Assistance Corporation (RCAC) for providing refreshments at the 2014 Funding Fairs in Redding, Fresno, San Luis Obispo, Bakersfield, and Perris; and for handling the 2014 Funding Fair registration.

Acknowledgement and thanks also go to the following 2014 Funding Fair site providers:

- *California Environmental Protection Agency Headquarters – Sacramento*
- *Redding/Shasta Public Library - Redding*
- *Fresno State University – Fresno*
- *San Luis Obispo County Library – San Luis Obispo*
- *Kern County Health Department – Bakersfield*
- *Eastern Municipal Water District - Perris*