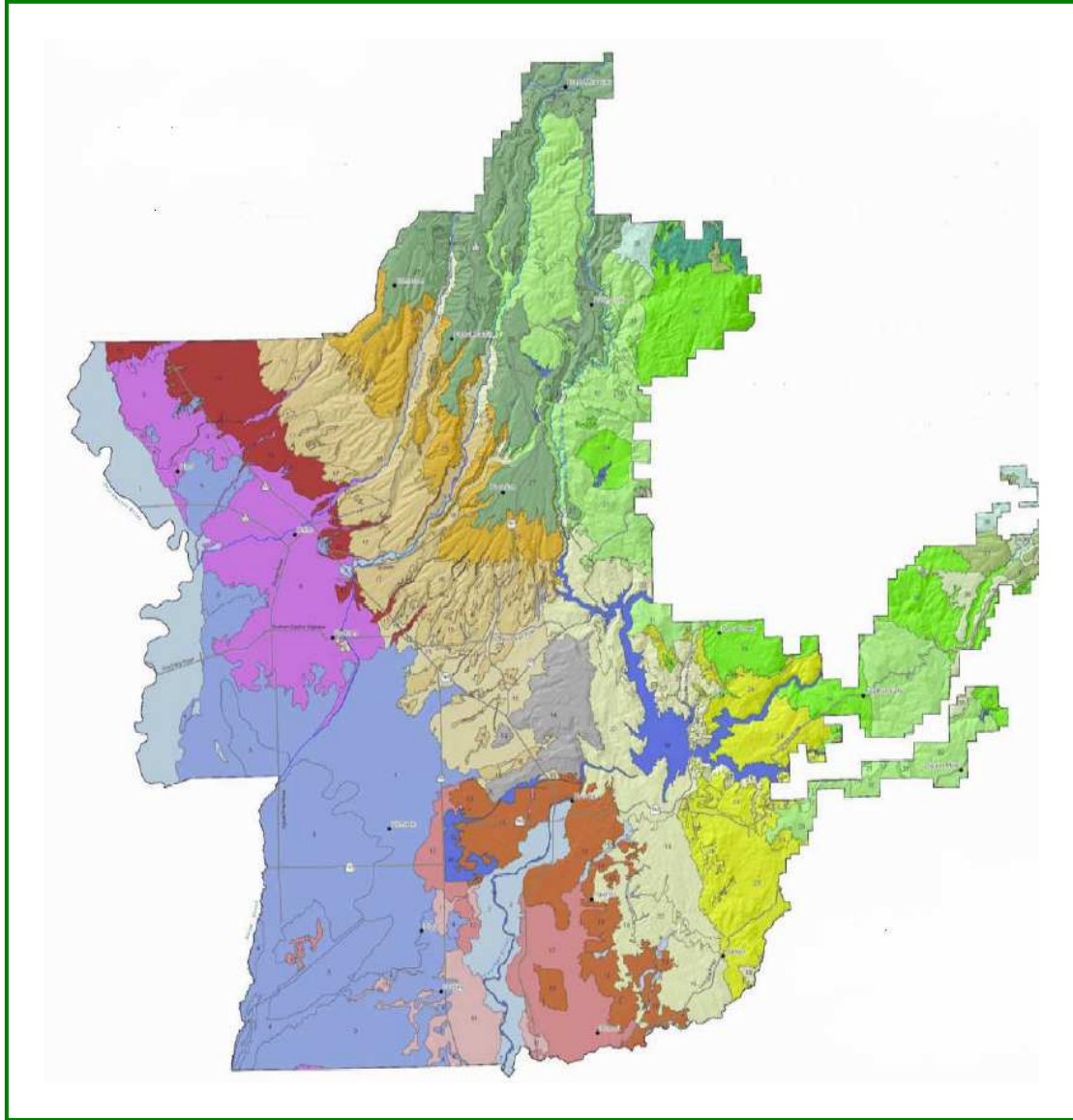


On-Site Wastewater Program Evaluation

IMPLEMENTATION PLAN



BUTTE COUNTY PUBLIC HEALTH DEPARTMENT

August 8, 2006

Background

The Departments of Public Health and Public Works presented a report to the Board of Supervisors in October of 2004 recommending that outside consulting services be used in the development of on-site wastewater policies and standards to address, at a minimum; a) compliance with AB 885 by the year 2009, b) oversight of system operation, maintenance and replacement, c) establishment of one or more regional sanitation districts, and d) a recommendation to provide cost recovery.

Butte County Public Health Department entered into a contract with Questa Engineering in June of 2005 to perform this work. The consultant interviewed staff and held a series of public/community meetings for additional input.

The Final Report was presented to the Board of Supervisors on June 13, 2006. The Final Report was accepted by the board and staff was directed to develop a draft plan for implementation of the recommendations identified in the report and present the draft plan at the Board's August 8, 2006 meeting.

This plan was developed to meet this directive by the Board. The plan proposes: (a) Implementation goals, (b) Implementation objectives, (c) Key program elements, and (d) Preliminary timeline for implementation.

A. Implementation Goals

- We will develop a program that protects public health and the environment
- We will develop an updated, user-friendly on-site wastewater program
- Our program will allow individualized solutions and broad application of available technologies for properties based on analysis of geology, hydrology, and soil
- We will build and maintain a strong partnership with the private sector
- We will assess, with the assistance of an advisory committee, all proposed program elements for unintended secondary consequences carrying adverse impacts to stakeholder groups and the public, and we will clearly communicate these impacts to the Board of Supervisors for their deliberation
- We will maintain an adequate level of professional staff that receive continuing training in all aspects of on-site wastewater management, are certified by a third-party entity for the tasks they perform, and are registered as Environmental Health Specialists.

B. Implementation Objectives

1. Establish Wastewater Advisory Committee with a membership that can both provide technical expertise and represent the interests of county's residents
2. Draft and present to the Board an ordinance and an on-site wastewater guidance manual
3. Develop and implement a training plan for program staff

4. Sponsor periodic regional training events for staff, advisory committee members, and stakeholders
5. Draft and bring to the Board an operation and maintenance program for newly approved individual on-site wastewater systems that utilize supplemental treatment
6. Draft and bring to the Board a document that modifies or replaces Resolution 87-108 to provide guidance in the siting, permitting, construction, and management of wastewater ponds
7. Establish a county-wide wastewater system management, such as a sanitation district

C. Elements of Program Development

Standard or Practice	Reference		Implementation Plan
REGULATORY STRUCTURE			
Overall wastewater program management by BCEH	Questa	Page 103	Will be written into new ordinance and manual.
Develop MOU with RWQCB in lieu of a Conditional Waiver	Questa	Page 103	This pertains to identifying program requirements after passage of the statewide regulation
Report annually to RWQCB as MOU requirement	Questa	Page 103	This recommendation needs further consideration based on the difficulty of data collection, the length of the reporting period, and the capacity of the regional board to review and make use of the data submitted.
Establish permitting program that distinguishes between conventional and alternative systems	Questa	Page 103	This will be written into the ordinance and manual.
Manage conventional systems equivalent to EPA Level 1: Site evaluations Construction permitting Public education Complaint investigation	Questa	Page 104	This will be written into the ordinance and the manual.
Manage alternative systems equivalent to EP Level 3: EPA Level 1 elements, plus ROP with monitoring, reporting, and renewal flexible, based on system type and size	Questa	Page 104	This will be written into the ordinance and the manual.
Continued creation of new parcels in manner consistent with Appendix 7	Brad		This recommendation is to provide continuity with past and current practice until such time that state requirements necessitate a change in our standards.
Develop structural set of regulations to specify fundamental aspects of the program	Questa	Page 69	This will be how the ordinance will be structured.
Develop policy guidelines to put forward specific design requirements for system siting, design, construction, operation, and maintenance	Questa	Page 69	This is how the manual will be structured.
Develop provisions in regulation for reduction in standards for large acreage parcels to minimize impact of new regulations and policies on existing parcels created under Appendix 7 with the expectation of standard gravity septic systems	Brad		This recommendation is to provide continuity with past and current practices until such time that the state requirements necessitate a change in our standards.
SITE EVALUATION			
Site based application for individualized solutions based on geological, hydrological, and soils specifics of each site	Questa	Page 68	This will be written into the ordinance and the manual.
Allow broad application of technologies with preference toward technologies with lower management requirements	Questa	Page 68	This will be written into the ordinance and the manual.
Performed by qualified professional PE, PG, or REHS	State Reg (Draft 3/16/06)	Article 3 §22910 (e)	This will be written into the ordinance and the manual.
DESIGN REQUIREMENTS			
Disperse effluent to subsurface soils in manner providing unsaturated zone	State Reg	Article 3	This will be written into the manual.

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Standard or Practice	Reference		Implementation Plan
treatment and aerobic decomposition	(Draft 3/16/06)	§22910 (b)	
Based on expected influent quality and quantity and on characteristics of the site and soils	State Reg (Draft 3/16/06)	Article 3 §22910 (d)	This will be written into the ordinance and the manual.
Performed by qualified professional (PE, PG, or REHS)	State Reg (Draft 3/16/06)	Article 3 §22910 (f)	Next-released version of the state regulation will not require conventional, gravity systems to be designed by a "qualified professional." Requirement for "qualified professional" to design community and supplemental treatment systems will be in our ordinance and manual.
Septic tank specifications	State Reg (Draft 3/16/06)	Article 4	This will be written into the manual.
The base of the dispersal system shall be designed and installed at the shallowest practicable depth at or below the original	State Reg (Draft 3/16/06)	Article 4 §22914 (a)	This will be written into the manual.
Dispersal using bottom area of the dispersal system only	State Reg (Draft 3/16/06)	Article 4 §22914 (b)	This will be written into the manual.
A maximum of one foot of engineered fill meeting the certain specifications may be used to meet vertical separation requirements to seasonal high groundwater or fractured/weathered bedrock	State Reg (Draft 3/16/06)	Article 4 §22914 (c)	This provision needs additional consideration by staff and our advisory committee, because of concern about the use of fill.
Vertical separation requirements: Standard system = 3 ft Supplemental treatment = 2 ft	State Reg (Draft 3/16/06)	Article 4 §22914 (d) and (e)	This will be written into the ordinance and the manual. Because this could impact existing parcels, this provision will be coupled with the allowance for vertical separation reduction on parcels 5+ acres.
Supplemental treatment required where perc is faster than 5 min/in and less than 5 ft vertical separation	State Reg (Draft 3/16/06)	Article 4 §22914 (f)	This provision needs further analysis consideration, by staff and our advisory committee, to consider potential impacts for our county.
Minimum of 1 ft of soil below disposal area must perc slower than 5 min/in	State Reg (Draft 3/16/06)	Article 4 §22914 (f)	This provision needs further analysis consideration, by staff and our advisory committee, to consider potential impacts for our county.
All pump systems equipped with visual or audible alarms or telemetric alarms and have storage capacity for 24-hour	State Reg (Draft 3/16/06)	Article 4 §22914 (g)	This will be written into the manual.
Gravel-less chambers may be sized using a multiplier of not less than 0.7	State Reg (Draft 3/16/06)	Article 4 §22914 (h)	This will be written into the manual.
Minimum of 6 inches soil cover over the dispersal system;	State Reg (Draft 3/16/06)	Article 4 §22914 (i)	This will be written into the manual.
Evapotranspiration and infiltration (ETI) systems designed so evaporation and infiltration exceed the design waste flow combined with a 25-yr return rate precipitation event on an annual and seasonal basis.	State Reg (Draft 3/16/06)	Article 4 §22914 (k)	This provision needs additional consideration, consideration by staff and our advisory committee, because of concern about the effectiveness of ET systems.
ADDITIONAL DESIGN REQUIREMENTS FOR SUPPLEMENTAL TREATMENT SYSTEMS			
Components designed to treat to the following: BOD = 30 mg/L or CBOD = 25 mg/L (30 day average) TSS = 30 mg/L (30 day average)	State Reg (Draft 3/16/06)	Article 4 §22913 (a)	This will be written into the ordinance and the manual provided it is determined that intermittent, single pass sand filters and ATUs meet the standard.
Where N is identified by RWQCB in Basin Plan as a water quality concern, components designed to treat to the following: TN = 10 mg/L (30 day average)	State Reg (Draft 3/16/06)	Article 4 §22913 (a)	This will be written into the manual.
Where disinfection is required, components designed to treat to the follow-	State Reg (Draft 3/16/06)	Article 4	It is our understanding the disinfection has been removed as an option from the soon-to-be latest draft of the state regulation. If not, then this

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Standard or Practice	Reference		Implementation Plan
ing: Total coliform 10 MPN/100 ml (95 th percentile) where perc = 1-10 min/in or sand texture Total coliform 1,000 MPN/100 ml (95 th percentile) where perc slower than 10 min/in or texture other than sand		§22913 (b)	will be written into the manual.
Non-proprietary components certified by qualified professional (PE, PG, or REHS) prior to installation	State Reg (Draft 3/16/06)	Article 4 §22913 (c)	This will be written into the manual.
Certification of proprietary components by independent third-party testing laboratory	State Reg (Draft 3/16/06)	Article 4 §22913 (d)	This will be written into the manual.
Equipped with visual or audible alarm and telemetric alarm	State Reg (Draft 3/16/06)	Article 4 §22913 (f)	This will be written into the manual.
Storage capacity for 24-hour power outage	State Reg (Draft 3/16/06)	Article 4 §22913 (f)	This will be written into the manual.
SPECIAL DESIGN REQUIREMENTS FOR SEEPAGE PITS			
Seepage pits designed on sidewall area as the infiltrative surface and are allowed only where all of the following apply: The site is unsuitable for shallow dispersal systems due to soil or spatial conditions; The seepage pit maintains 10 ft vertical separation for septic tank effluent or 2 ft vertical separation for effluent from supplemental treatment	State Reg (Draft 3/16/06)	Article 4 §22914 (j)	This will be written into the manual. We do not approve seepage pits for new parcels, only on existing parcels.
Seepage pits designed with less than 2 ft vertical separation are allowed when the following apply: Supplemental treatment Disinfection One of the following: Site is served by community water supply and has no domestic wells within 600 feet, or Site was approved prior to effective date of regulations, and was approved for septic system at time of parcel approval and well is sealed 20 ft below bottom depth of pit	State Reg (Draft 3/16/06)	Article 4 §22914 (j)	This will be written into the manual. We do not approve seepage pits for new parcels, only on existing parcels.
OPERATIONAL REQUIREMENTS			
Prohibition against certain wastes discharged into system	State Reg (Draft 3/16/06)	Article 3 §22910 (a) and (h)	This will be written into the manual.
ETI systems operated to prevent human exposure to wastewater.	State Reg (Draft 3/16/06)		This provision needs additional consideration by staff and our advisory committee, because of concern about the effectiveness of ET systems.
O&M REQUIREMENTS			
Establish and operations and maintenance program Non retroactive Use renewable operating permits (ROP)	Questa	Page 69	This will be written into the ordinance and manual.
System O&M by private sector with BCEH oversight	Questa	Page 104	This will be written into the manual.

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Standard or Practice	Reference		Implementation Plan
BCEH to establish registration program for O&M service providers that requires continuing education	Questa	Page 104	This will be written into the manual.
O&M Manual for all new and replaced systems prepared by qualified professional (PE, PG, or REHS) to include: Name, address, telephone number, business and professional license of the OWTS designer; Name, address, telephone number, business and professional license of the OWTS installer; Name, address, and telephone number of the qualified service provider that maintains any supplemental treatment system; Instructions for the proper operation and maintenance and a protocol for an assessment of performance of the OWTS; Record plan with a certification that the dispersal system meets all applicable requirements contained in §22914(a); Design flow and performance requirements for the OWTS; List of substances that could impair performance if discharged to the OWTS, including those applicable to ¶h; Copies of the RWQCB waiver or waste discharge requirements.	State Reg (Draft 3/16/06)	Article 3 §22910 (i)	This will be written into the manual.
Effluent from supplemental treatment system tested quarterly and tested by certified laboratory	State Reg (Draft 3/16/06)	Article 4 §22913 (e)	It is our understanding that this requirement has been changed to require "periodic effluent monitoring as required by the RWQCB." Complying with this will require installation of shallow monitoring wells. This will be written into the manual.
When disinfection is required, qualified service provider inspects weekly unless telemetric monitoring is installed, and testing is evaluated quarterly based on standard of 2.2 MPN/100 ml total coliform	State Reg (Draft 3/16/06)	Article 4 §22913 (g)	This will be written into the manual.
Owner must maintain as-built of system and O&M manual	State Reg (Draft 3/16/06)	Article 8	This will be written into the manual.
COMMUNITY SYSTEM MANAGEMENT			
Community systems >2,500 gpd (private large flow systems) remain under the jurisdictions of RWQCB with no operating permits from BCEH required	Questa	Page 105	This will be written into the ordinance and manual.
Continue use of CSAs for oversight of community systems	Questa	Page 105	This will be written into the ordinance and manual.
Consolidate CSAs to as great an extent as is feasible and place all new community systems under the management of the consolidated CSA, with zones of benefit for each of the community systems managed	Questa	Page 105	This is included in the policy issues brought before the Board. We are proposing establishment of a countywide sanitation district with zones of benefit to address the costs associated with operation and maintenance of parcels within new subdivisions.
Use private sector for a portion of CSA managed system operation	Questa	Page 105	We will need further input from DPW and others on how this recommendation might be implemented.
USE OF PONDS			
Modify Resolution 87-108 to allow more flexibility in the use of wastewater ponds by: Distinguishing between the different types of ponds Establish minimum and maximum pond size	Questa	Pages 78-80	This is one of the policy issues brought before the Board. We are proposing a county ordinance that incorporates these recommendations

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Standard or Practice	Reference		Implementation Plan
Adopt setback and siting criteria proposed in Aug 2005 Establish risk based restrictions for certain pond types Establish design standards for hydraulic capacity, design methodology, freeboard, and construction Establish operational requirements to assure proper O&M Establish TMF capacity for operators Establish county ROP to accompany RWQCB's WDRs Mandatory project review by municipalities when in or near spheres of influence to public sewer system			
Maintenance of local land use and development control to assure ponds do not result in inappropriate development, by: Overall policy update (to Resolution 87-108) Conditional Use Permits Grading and Building Permits Renewal Operating Permits County input to the WDRs by the RWQCB			These provisions will be written into the final revision or replacement of Resolution 87-108 takes
OTHER REGULATORY REQUIREMENTS			
Special requirements for waters determined impaired under Section 303(d) Clean Water Act	State Reg (Draft 3/16/06)	Article 5	We do not plan to place this requirement in our ordinance or manual. Our county has one 303(d) listed waterway (Lower Feather River), but it is listed for pesticides, not septic issues. Additional regulatory provisions would be developed for our ordinance and manual at such time that a water body impaired by septic systems has been established.
Monitoring requirement for domestic wells	State Reg (Draft 3/16/06)	Article 7 §22950 (a) and (b)	We do not plan to place this requirement in our ordinance or manual. The requirement is not directly related to septic disposal, would be costly to the homeowner, and would be difficult to enforce.
Inspection and pumping requirement for septic tanks	State Reg (Draft 3/16/06)	Article 7 §22950 (c)	This requirement needs further consideration, by staff and our advisory committee, before being included in our ordinance or manual. It could be difficult to enforce, depending on the degree of compliance required.
Method for determining seasonal groundwater level	State Reg (Draft 3/16/06)	Article 9	This requirement needs further consideration, by staff and our advisory committee, for local applicability before being included in our manual.
COST RECOVERY			
Determine what additional fees necessary for alternative systems is initiated	Questa	Page 106	We propose making the necessary changes in our program and tracking costs prior to increasing fees.
BCEH should not perform construction inspections when consultants are also providing the same inspections	Questa	Page 106	We are not in agreement with this practice, but would give it consideration through our advisory committee.
County should determine whether to subsidize system repair permitting fees	Questa	Page 107	We propose tracking costs prior to modifying our fee structure for repair systems.
Permits for commercial developments, including restaurants and other high strength/volume waste producers should pay full costs of permit processing	Questa	Page 107	We propose tracking costs prior to modifying our fee structure for repair systems.

D. Implementation Timeline

Objective	Task	Resp. Party	Target Date	Aug 06	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07
				7/14/21/28	4/11/18/25	2/9/16/23/30	7/13/20/27	4/11/18/25	1/8/15/22/29	5/12/19/26	2/9/16/23/30	7/14/21/28	4/11/18/25	
A. Establish Wastewater Advisory Committee (WAC)	1. Identify key stakeholders categories	Brad		■										
	2. Identify individuals in each category	Land Use Staff		■										
	3. Contact potential members to solicit participation	Brad		■	■									
	4. Schedule meeting, develop agenda, arrange logistics	Brad		■	■									
	5. Brief committee	Brad		■	■									
	6. Establish bylaws	Brad		■	■									
	7. Select officers	WAC		■	■									
	8. Schedule regular meetings and develop agenda for next meeting	Brad				■	■	■	■	■	■	■	■	■
	9. Monthly meetings	Brad												
B. Draft Wastewater Ordinance and Manual	Wastewater Ordinance													
	1. Develop draft ordinance	Brad		■	■	■	■	■	■	■	■	■	■	■
	2. Distribution of ordinance to WAC for committee review	Karen		■	■	■	■	■	■	■	■	■	■	■
	3. Ordinance reviewed by County Counsel	Co Counsel		■	■	■	■	■	■	■	■	■	■	■
	4. Ordinance modifications and update	Brad		■	■	■	■	■	■	■	■	■	■	■
	5. Distribute ordinance to User's Group	Karen		■	■	■	■	■	■	■	■	■	■	■
	6. Final approval of ordinance by WAC	WAC		■	■	■	■	■	■	■	■	■	■	■
	7. Environmental review under CEQA	Vance/Doug		■	■	■	■	■	■	■	■	■	■	■
	8. Prepare Board Item and submit for agenda review	Brad		■	■	■	■	■	■	■	■	■	■	■
	9. Present BOS item	Brad		■	■	■	■	■	■	■	■	■	■	■
	10. Second reading of ordinance	BOS		■	■	■	■	■	■	■	■	■	■	■
	11. Effective date	BOS		■	■	■	■	■	■	■	■	■	■	■
	Wastewater Manual													
	12. Develop draft manual	Brad		■	■	■	■	■	■	■	■	■	■	■
	13. Distribution of manual to WAC for committee review	Karen		■	■	■	■	■	■	■	■	■	■	■
	14. Modify and update manual	Brad		■	■	■	■	■	■	■	■	■	■	■
	15. Distribute manual to User's Group	Karen		■	■	■	■	■	■	■	■	■	■	■
	16. Public workshops	Brad/WAC		■	■	■	■	■	■	■	■	■	■	■
	17. Finalize approval of the manual	Brad		■	■	■	■	■	■	■	■	■	■	■
	18. Prepare resolution and BOS item for agenda review	Brad		■	■	■	■	■	■	■	■	■	■	■
19. Present BOS item	Brad		■	■	■	■	■	■	■	■	■	■	■	
20. Effective date	BOS		■	■	■	■	■	■	■	■	■	■	■	
C. Individual Staff Development	1. Interview each staff to determine training history and training needs	Brad		■										
	2. Identify training opportunities	Brad/Vance/Doug		■	■									
	3. Register staff in training	Karen		■	■									
	4. Utilize Department's training tracking system	Staff		■	■									
	5. Register staff for appropriate COWA inspector certification	Karen		■	■									
D. Regional Training Event	1. Develop course plan for special training event	Brad		■										
	2. Lock in meeting location	Karen		■										
	3. Lock in speakers	Brad		■										
	4. Identify and lock in vendors	Brad		■										
	5. Identify sponsors (COWA, RWQCB, CEHA, CCDEH)	Brad		■										
	6. Identify soil types and field training sites	Brad/Norm		■	■									
	7. Attain permission from property owner	Brad		■	■									
	8. Solicit and lock in backhoe operator	Brad		■	■									
	9. Gauge regional interest in the event	Brad		■	■									
	10. Develop budget	Brad		■	■									
	11. Develop agenda	Brad		■	■									
	12. Send out notices	Karen		■	■									
	13. Receipt registration fees	Karen		■	■									
	14. Meet with soil scientist day before event to review soil test holes	Brad		■	■									
	15. Prepare and equip training room	Karen/Mart		■	■									
	16. Send out certificates of attendance	Karen		■	■									
E. O&M Program for individual and small community wastewater systems	Program will be developed a part of the Ordinance and Manual described above				■	■	■	■	■	■	■	■	■	■
F. Pond Ordinance	1. Develop draft ordinance	Brad				■	■	■	■	■	■	■	■	■
	2. Ordinance reviewed by County Counsel	Co Counsel				■	■	■	■	■	■	■	■	■
	3. Ordinance modifications and update	Brad				■	■	■	■	■	■	■	■	■
	4. Distribute ordinance to User's Group	Karen				■	■	■	■	■	■	■	■	■
	5. Ordinance modifications and update	Brad				■	■	■	■	■	■	■	■	■
	6. Environmental review under CEQA	DDS				■	■	■	■	■	■	■	■	■
	7. Prepare Board Item and submit for agenda review	Brad				■	■	■	■	■	■	■	■	■
	8. Present BOS item, adopt ordinance	Brad/BOS				■	■	■	■	■	■	■	■	■
	9. Second reading of ordinance	BOS				■	■	■	■	■	■	■	■	■
	10. Effective date	BOS				■	■	■	■	■	■	■	■	■
G. Sanitation District	1. Prepare resolution of application for LAFCo	Brad					■	■	■	■	■	■	■	■
	2. Resolution reviewed by County Counsel	Co Counsel					■	■	■	■	■	■	■	■
	3. Resolution modifications and update	Brad					■	■	■	■	■	■	■	■
	4. Prepare Board Item and submit for agenda review	Brad					■	■	■	■	■	■	■	■
	5. Present BOS item, adopt resolution	Brad/BOS					■	■	■	■	■	■	■	■
	6. Submit application to LAFCo	Brad					■	■	■	■	■	■	■	■
	7. LAFCo processes application	LAFCo					■	■	■	■	■	■	■	■
	8. Environmental review under CEQA	DDS					■	■	■	■	■	■	■	■
	9. District approved and becomes active	Public Works					■	■	■	■	■	■	■	■