

# Los Osos Wastewater Project

San Luis Obispo County  
Department of Public Works  
April 7, 2009



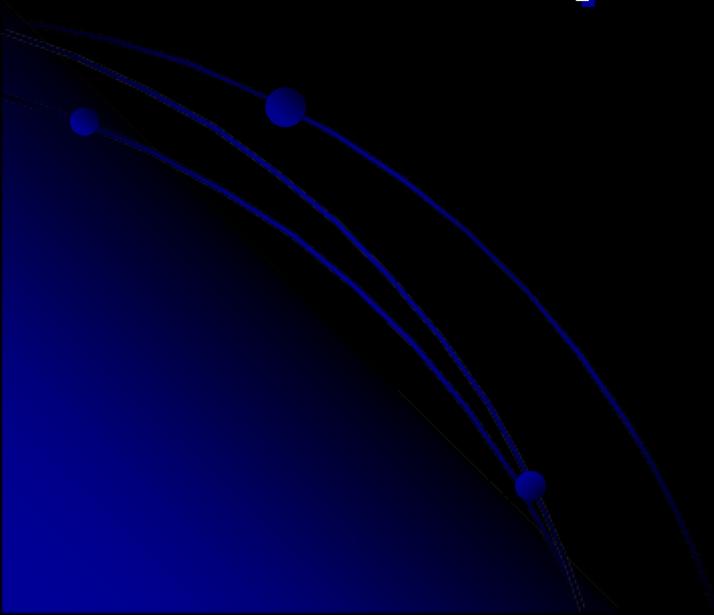
# Monthly Update

- Community Survey
  - Today's Recommendation and Status of "Parallel Efforts"
  - STEP Collection Alternative
- 

# Community Survey

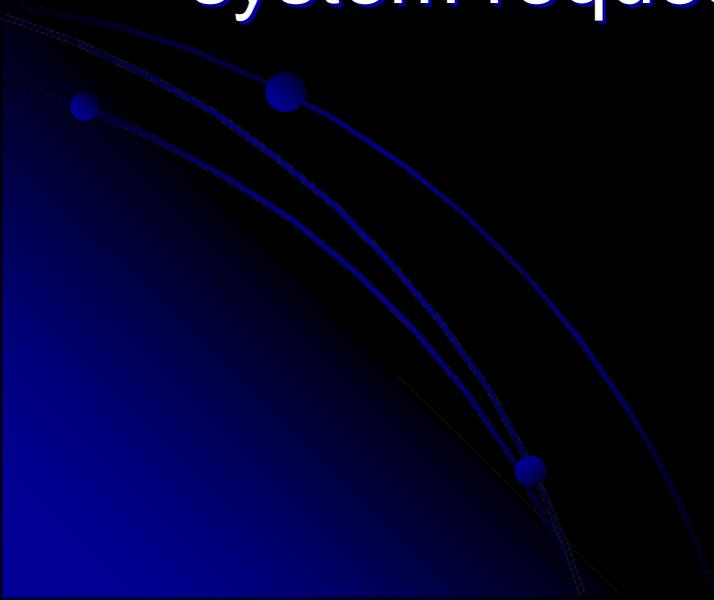
Robyn Letters

Opinion Studies



# Today's Recommendation

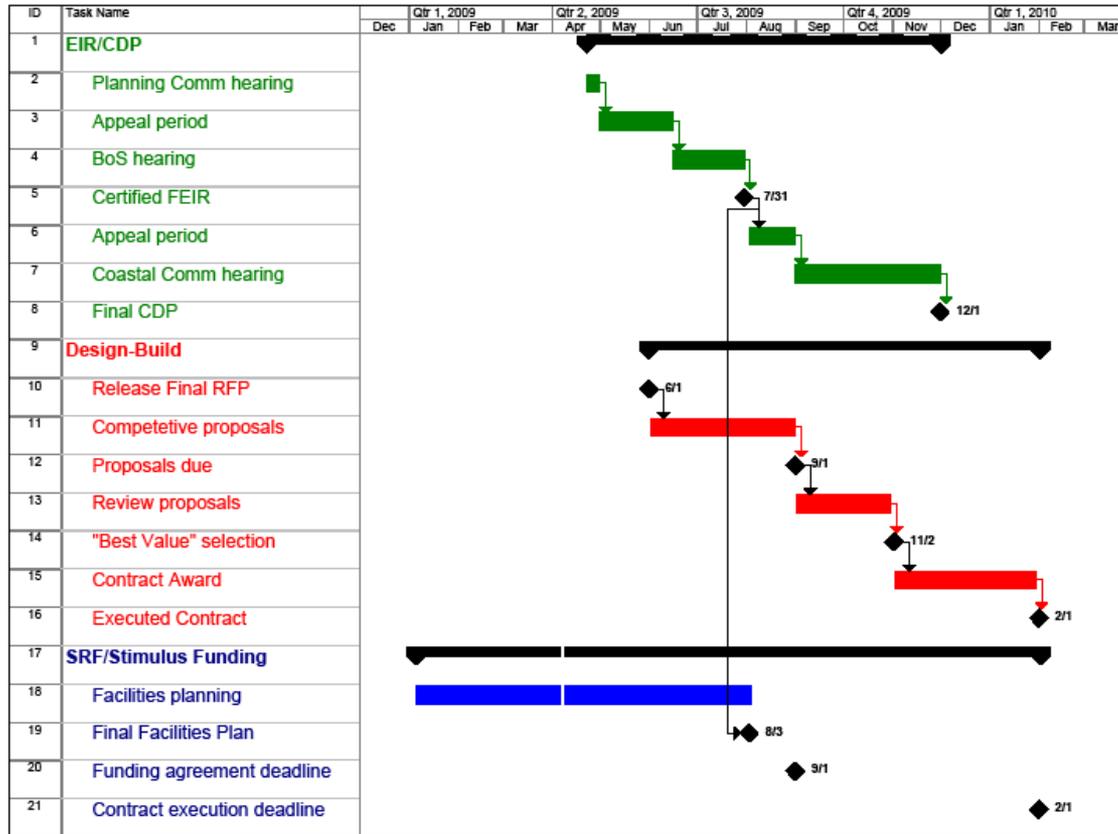
- Approve a contract amendment with Carollo Engineers in an amount of \$100,000 to provide the technical specifications for a gravity collection system request for proposal (RFP).



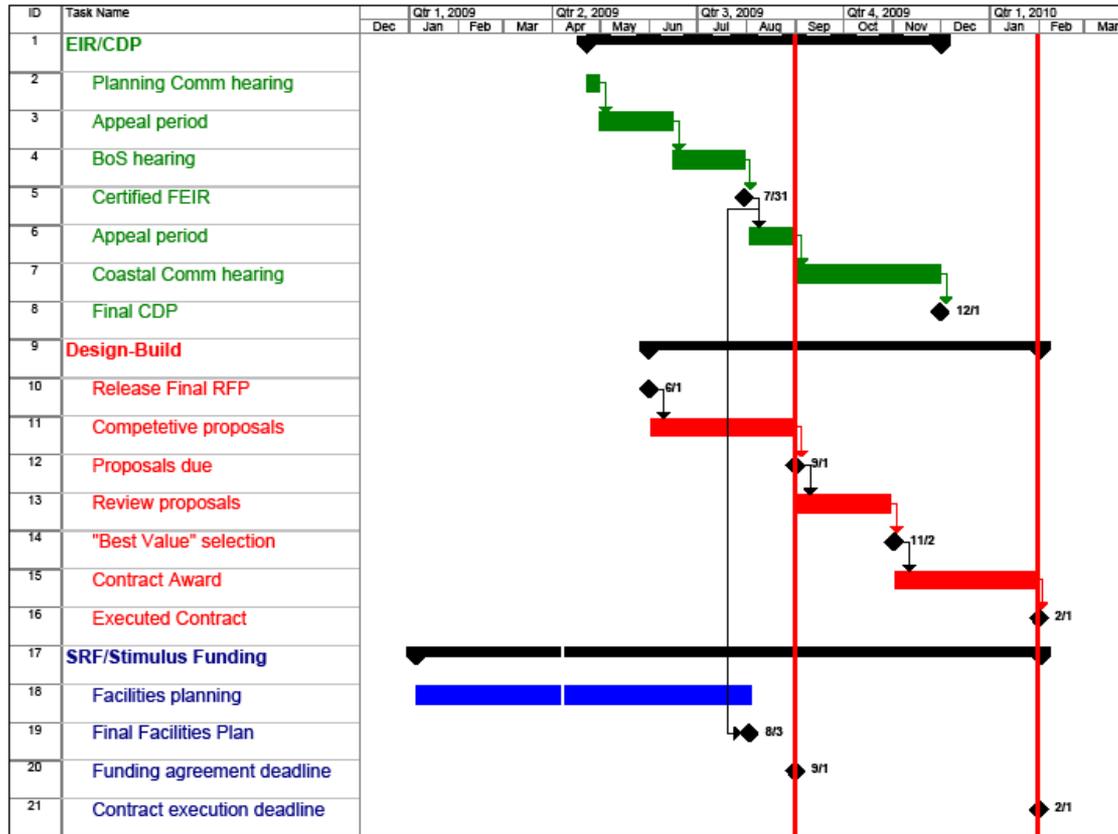
# Pursuing Stimulus Funding

- Parallel Path Dependencies:
  - Timely Completion of Design Build for Gravity System (part of environmentally superior alternative – initial recommendation obtained in January to pursue parallel paths)
  - Timely Completion of Final EIR and Coastal Development and other Permits

# Parallel Paths



# Parallel Paths



# Stimulus Funding Benefits

- State Water Board SRF Funds
  - Grants
  - Low Interest Loans
- SWB Action on March 17, 2009
  - 4% MHI rule amended into policy at request of County and Blakeslee

# Stimulus Funding Benefits

- USDA

- U.S. Congressional Representatives (Capps and McCarthy) have submitted population waiver request

- Timing is somewhat more flexible but should target treatment facilities

# Stimulus Funding Benefits

- State Water Board-Clean Water SRF
  - Up to \$10 Million in grants per project for disadvantaged communities
  - 1% interest for remainder of project costs
  - Monthly savings \$ 15 - \$ 30 per month (for collection system )
- Additional savings possible with USDA or WRDA

# Coastal Commission Letter

- Comment Letter Received March 17, 2009 covering:
    - Comments on Draft EIR
    - Comments on Coastal Development Permit referral
  - Our Goal is that the issues are vetted through the Planning Commission hearings
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# Coastal Commission Letter

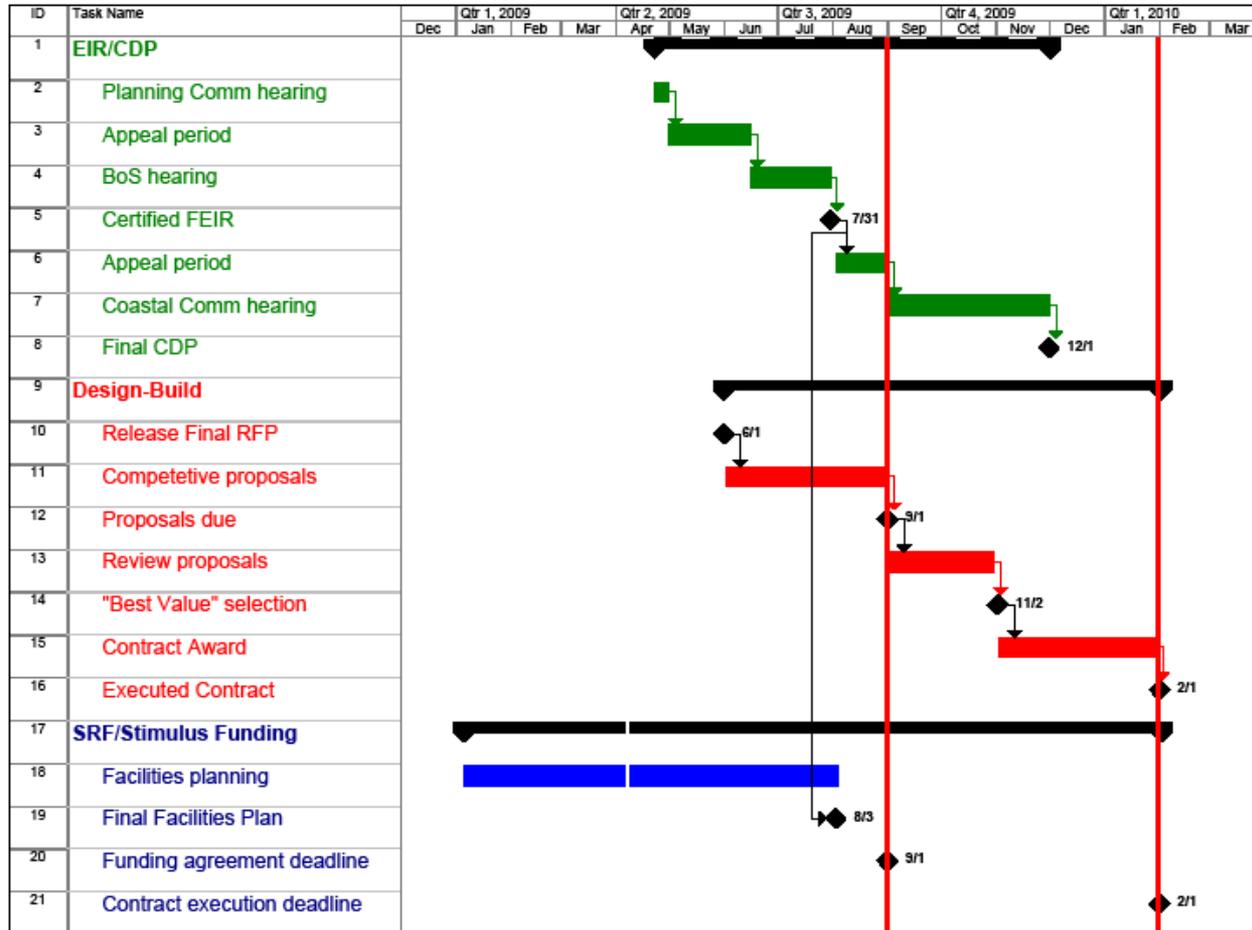
- Key Issues

1. Tertiary Treatment
2. Effluent Disposal
3. Growth Inducement
4. Agriculture
5. Visual Effects

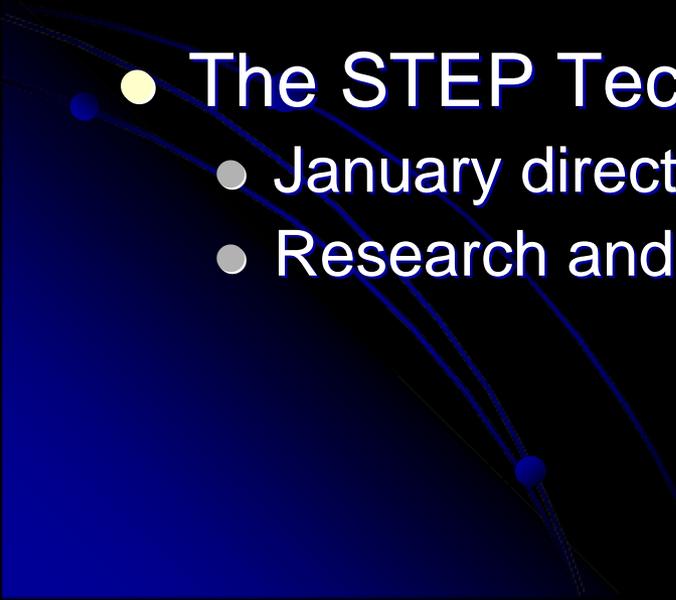
- Project Response

1. Conditioned
2. Maintain all options
3. Service Area Defined
4. No Feasible Alternative
5. Detailed Analysis w/Mitigation

# Staff Recommendations – Questions?



# STEP Alternative Discussion

- Design Build Shortlist and Statement of Qualifications
    - Criteria and Conclusions
    - Appeals Panel
  - The STEP Technology
    - January direction to pursue stimulus
    - Research and evaluations
- 

# Design-Build RFQ

- Public Contract Code § 20133
  - Clean Water SRF Guidelines
  - DBIA: Design-Build Manual of Practice
  - Solicitation of comments from construction industry on draft RFQ
  - Extensive contractor outreach
- 

# Design-Build RFQ

<b>Collection System</b>	<b>Treatment Facility</b>
ARB	Auburn Construction
Barnard Construction	C. Overaa & Co.
CH2M Hill	CDM
Kiewit Pacific	CH2M Hill
Mountain Cascade	J. R. Filanc Construction
MWH	Kaweah Construction
Shimmick Construction	Kiewit Pacific
Sundt Construction	MWH
W. A. Rasic Construction	Pacific Env. Resources Corp.
W. M. Lyles	Shimmick Construction

# Design-Build RFQ

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# Design-Build RFQ

<b>Evaluation and Ranking Criteria</b>	<b>Weight</b>
Pre-qualification Questionnaire Score	15%
Utilization of Local Contractors and Consultants	5%
Technical Approach and Team Expertise	30%
Understanding of Process, Goals, and Objectives	20%
Design and Construction Experience	30%

# Design-Build RFQ Short-List

- Collection System

- ARB
- MWH
- Sundt Construction

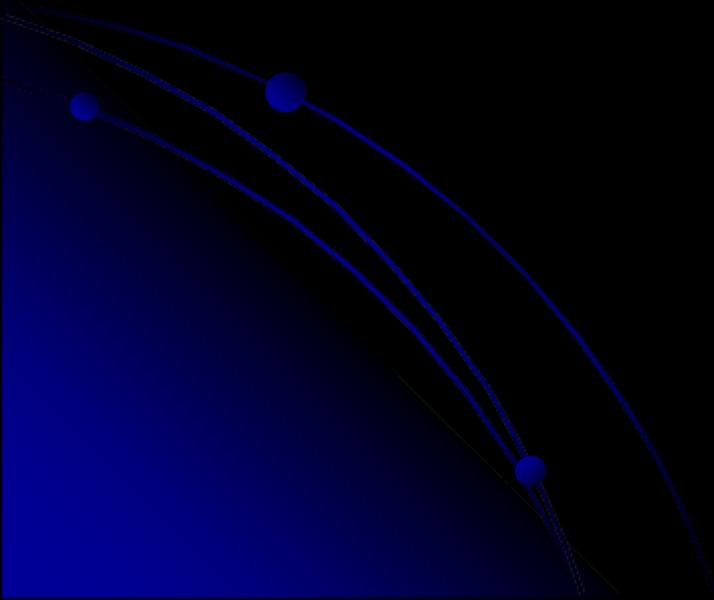
- Treatment Facility

- Auburn Construction
- CDM
- MWH

# RFQ Shortlist

Questions?

Next Discussion: The STEP Technology



# STEP Alternative Discussion

January Direction to Pursue Stimulus Funding was based on a gravity collection system identified in the DEIR as part of the Environmentally Superior Alternative, subject to:

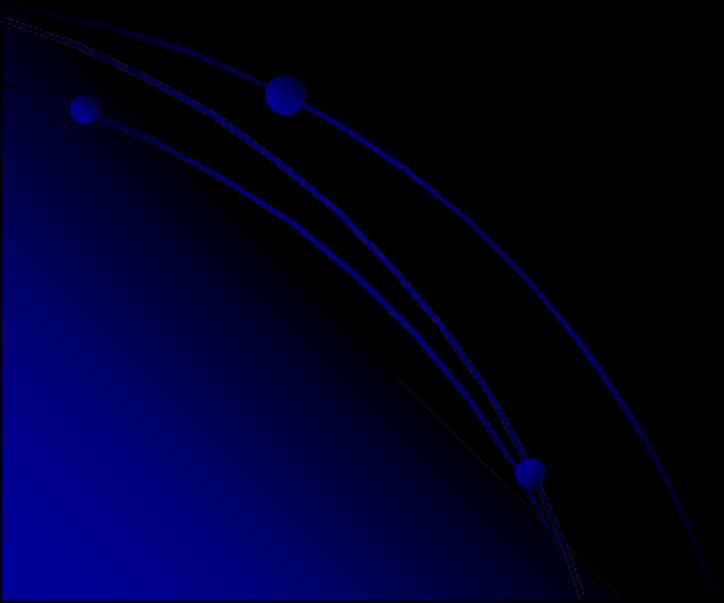
- Comments on Draft EIR
- Design Build SOQ's
- Results of the Community Survey

# STEP Alternative Discussion

The question therefore becomes...

Does the research and evaluation of the STEP alternative, and the additional work since January, create a compelling argument to expend additional fiscal and project team resources on the STEP alternative?

# 7 Reasons to not Continue Step Efforts identified in Staff Report



# STEP/STEG Collection System

## #1 of 7

- Preparing the next phase “Request for Proposals” and including technical specifications for a STEP/STEG system would require additional funds and will cause schedule delays that will significantly impair the opportunity to pursue federal stimulus funds for the project.

# STEP/STEG Collection System

## #1 of 7

- Design-Build Technical Specifications
  - Gravity system with existing design: \$150k
  - STEP/STEG with no design: \$150 - \$200k
- Final EIR and Coastal Development Permit delayed minimum 6 to 8 months
- Lost opportunity for Stimulus

# STEP/STEG Collection System

## #1 of 7 - continued

- SRF Program Stimulus Funds
  - Grants and 1% funding available
  - September 1, 2009 deadline for final Facilities Plan and Funding Agreement
  - February 1, 2010 deadline for executed construction contracts
- Parallel efforts needed to meet timeframe

# STEP/STEG Collection System

## #2 of 7

- The design-build submittals provided in Phase I did not indicate sufficient cost savings with a STEP/STEG system to meet the expectations of approximately two-thirds of the community survey respondents, including the one-half of respondents who are not interested in a STEP/STEG system at any cost savings.

# STEP/STEG Collection System

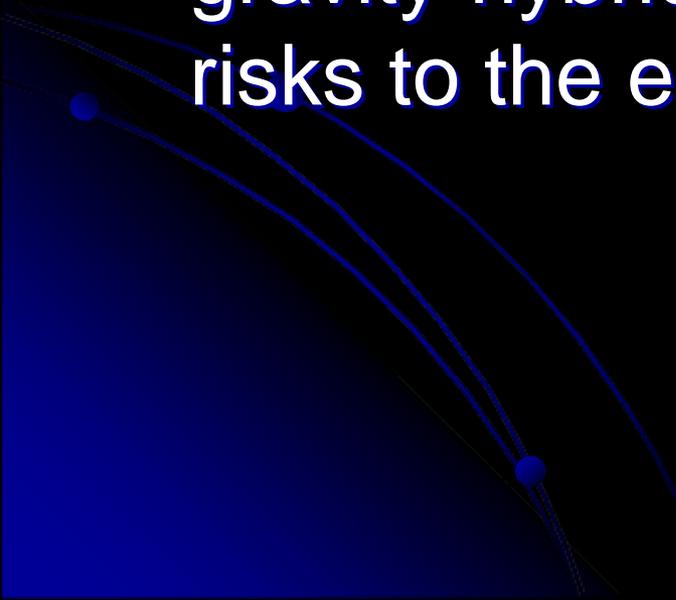
## #2 of 7

Construction Cost Estimate	Maximum Savings	Relative Savings	Monthly Savings
Ripley Report (2006)	\$30 M	34%	\$20-\$25
Fine Screening Report (2007)	\$20 M	28%	\$13-\$17
Claim of 20% savings (2009)	\$18 M	20%	\$12-\$15

- \$30/month savings for STEP/STEG is only worthwhile to 17% of homeowners
- 72% of homeowners do not want STEP/STEG if cost savings is less than \$30/month

# STEP/STEG Collection System

## #3 of 7

- The EIR analysis does not establish that STEP/STEG is the environmentally superior alternative and no evidence indicates that a properly maintained gravity-hybrid system poses significant risks to the environment.
- 

# STEP/STEG Collection System

## #3 of 7

- Project EIR
  - Gravity is environmentally superior
  - No significant impact to groundwater
  - STEP/STEG system has greater greenhouse emissions (methane)
- Coastal Commission staff letter:
  - No STEP issue raised

# STEP/STEG Collection System

## #4 of 7

- The STEP/STEG collection system alternative will require extensive planning and design work to be completed and compared to the gravity/hybrid collection system option.



# STEP/STEG Collection System

## #4 of 7

- Planning and design not sufficient for regulatory permit applications
- Design costs will erode expected D/B construction savings
- Project delays will erode expected D/B construction savings
- Many potential risks not yet identified

# STEP/STEG Collection System

## #5 of 7

- The STEP/STEG alternative has some significant uncertainty over how to obtain easements from each private property owner for the installation of new STEP septic tanks. Obtaining easements on essentially all of the private lots would be needed so the County can maintain the STEP tanks and pumps. Considering the apparently substantial community opposition, County staff is concerned that the County's use of eminent domain or Regional Water Board enforcement action against individual property owners would be needed to obtain the easements.

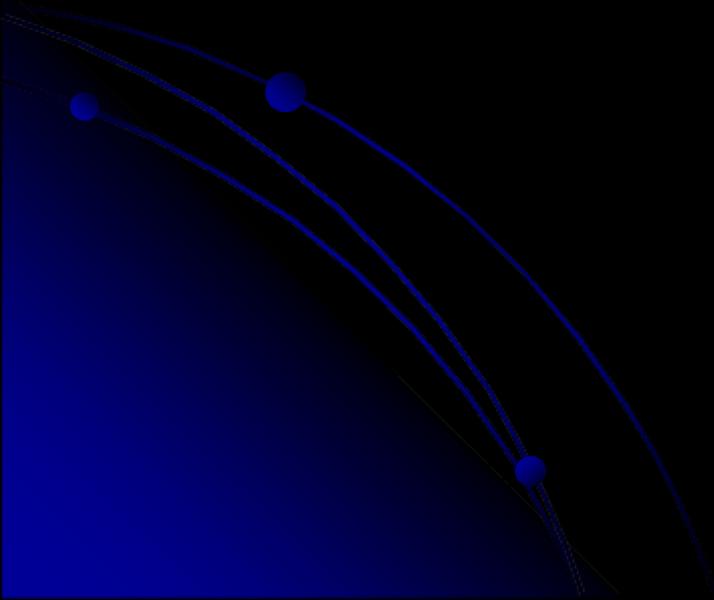
# STEP/STEG Collection System

## #5 of 7

- Major impacts on private property
- Substantial community opposition documented in recent survey
- Obtaining easements on private property could require:
  - Regional Water Board enforcement
  - Potential eminent domain
- Potential litigation???

# STEP/STEG Collection System #6 of 7

- The STEP/STEG alternative shifts the major impact of construction excavation from the County's road right-of-way to private properties.



# STEP/STEG Collection System

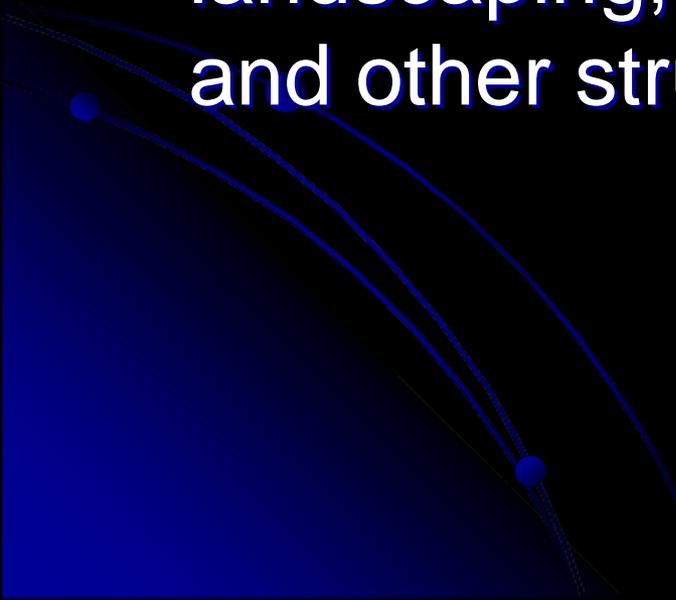
## #6 of 7 continued

- STEP/STEG tank dimension 6' x 14' x 6'
- Minimum excavation 10' x 18' x 9' deep at each home
- Potential excavations of 24' x 32' with sloped sides
- Major disruption of personal property, landscape, and hardscape





# STEP/STEG Collection System #7 of 7

- The STEP/STEG alternative will create significant additional costs for some property owners relating to upgrading electrical systems, restoring or relocating landscaping, driveways, retaining walls, and other structures.
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# STEP/STEG Collection System

## #7 of 7

- Estimates for average homeowner costs range from \$2,400 to \$7,500
  - Some individual homeowners would likely have costs exceeding \$10,000
  - Homeowner on-lot costs will erode expected D/B construction savings
- 

# STEP/STEG Collection System

- Addition of a STEP/STEG technology would be discretionary action of Board
- Prescriptive requirements would be necessary for STEP/STEG proposal in RFP

# Erosion of STEP/STEG Cost Savings

Possible 20%  
Construction  
Savings  
(\$15/month)

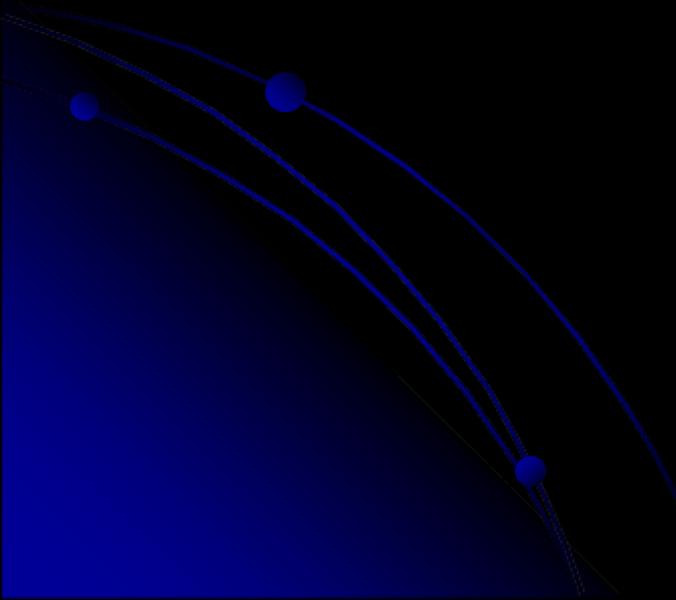
Extended  
Design  
Time

Loss of  
stimulus  
funding

Permitting

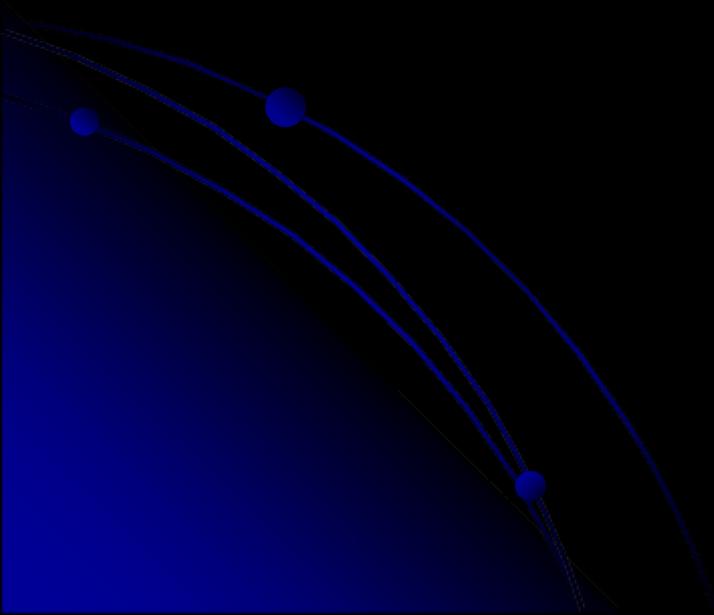
Eminent  
Domain  
Litigation

Final  
Savings  
???



# STEP Alternative

Questions?



## Virginia Tech / Virginia Cooperative Extension

<i>The consideration of alternative collection systems is appropriate when:</i>	Steven's County PUD Dist. (WA)	Southwest Barry Co. Sewer Authority (MI)	Douglas County Natural Resource at Glide (OR)	South Alabama Utilities (AL)	City of Olympia Public Works Dept. (WA)	Carpinteria Sanitary District Rincon Point (CA)	Charlotte County Utility Authority (FL)	Los Osos (CA)
The average lot size per property is more than one-half acre	N (for the most part)	N	N (for the most part)	N	N	N	N	N
The system will serve a community on a "very hilly" terrain	Y	Y	N	N	N	N	N	N
There will be fewer than 100 homes per mile of sewer pipe	Y	N	Y	Y	Y	N	N	N
The wastewater treatment system will only be serving a community of 10,000 people or less	Y	Y	Y	Y	Y	Y	N	N
There are subsurface obstacles, such as bedrock or groundwater, close to the ground's surface	Y	Y	Y	Y	Y	Y	Y	Y
Many of the properties currently have on-site systems such as septic tanks	Y	Y	Y	Y	Y (for the most part)	Y	Y	Y