TAC Special Meeting – July 16, 2007
Announcements from the Chair

The purpose of today's special meeting is to agree on the format and content of the report that the TAC will submit to the Board of Supervisors.

The Draft Pro/Con Analysis that we have produced to date contains a great deal of information pointing out, from the prospective of the TAC committees, what they feel are the positive and negative characteristics associated with the various alternatives for the components of our wastewater project. Since it is a relatively detailed analysis of a complex project it is somewhat difficult to follow and leads to no conclusions, from a TAC prospective, on the wastewater project.

In order to make this document relevant to the Board of Supervisors and to those who have not attended our meetings and listened to our discussions, I believe that we need, at the beginning of the report, an executive summary on the results of our work. It should be no more than a few pages and succinctly summarize our findings as they relate to whole projects. I also believe that as an Advisory Committee we should advise the Board as to which projects we believe should be advanced to the next level of screening.

I have heard from several of the TAC members and even from the public suggestions as to what this document should contain and Karen has even submitted a possible format for the summary.

As keeper of the Draft Analysis, I have thought about this quite a bit and would like to make a few suggestions of my own. Realizing that my suggestion of a 1 to 4 rating system of component alternatives was met with varying degrees of disdain, I submit that the purpose was only to enable us to bring those alternatives, which appeared to be better solutions for a particular component, forward in order to evaluate complete systems.

Over the past several months we have learned quite a bit about wastewater handling and, as a result, I believe that in addition to a Pro/Con on alternative components the TAC should recommend to the Board of Supervisors complete projects.

In my mind I see possibly two systems each consisting of a specific site, a treatment technology, a solids disposal system, and a level of effluent treatment. For each of these systems we would look at STEP/STEG collection and Gravity collection and thereby making a total of four projects.

These recommendations combined with a short summary of how we reached our conclusion and a summary table of 2 or 3 bullets each of pro/cons on the alternatives that combines all three committee findings would then become the executive summary.

Before we adjourn this meeting I would also like to announce another special TAC meeting for 12 PM on Monday, July 30, here at the Government Center. The purpose of that meeting will be to discuss the role of the TAC during the period between our report to the Board of Supervisors and the passing of the 218 election.

Presented
by Bill Garfinkel
7/16/07

LOS OSOS WASTEWATER PROJECT TECHNICAL ADVISORY COMMITTEE

San Luis Obispo County Department of Public Works

TAC

Submitted by Karen Venditti 7/16/07
10 pages

OVERVIEW OF THE TAC ANALYSIS

FORMAT: Make it reader friendly (simple), to the point, interesting/ engaging.

- Cover picture (comprehensive – unified- view of Los Osos, with portion of Bay in background, with focus on beauty, inspiring desire to protect our water resources)
- Graphics: clear comparison of project costs, detailing cost of components within bar. Gravity and STEP side-by-side for same project.

CONTENT

1. It's really about water: the importance of mitigating seawater intrusion and maximizing our water resources. Include note about our community's commitment to building a wastewater system, evidenced in every election since 1998. (It only a question of where and what kind of system we build.)

2. Understanding how a wastewater treatment works: a brief review the components and how they are interrelated.

3. The process by which TAC analyzed separate components first, using criteria developed by each working group, based on common core values

CORE VALUES*	MAJOR CRITERIA
Affordability	➢ Capital costs, including: - Construction - Road impacts - On-lot costs ➢ O&M costs, including energy usage ➢ Financing factors
	➢ Restoring and protecting our groundwater resources, including: - Mitigating seawater intrusion - Achieving groundwater balance in the basin
Flexibility	➢ Flexibility to meet future needs and opportunities, including: - Need to expand - Need to meet higher regulations - Regional opportunities - Alternative energy opportunities
Environmental Stewardship	➢ Environmental impacts, including biological and archeological considerations ➢ Potential risks due to system failure
Community	➢ Impacts on individual homeowners, residents, and business, including:

- Construction nuisance
- Odor, noise

Controllability ➢ Minimizing risks of third party decisions, policies

*Not necessarily in order of priority. These values are the basis of criteria used in evaluating the various alternatives.

4. Putting the pieces together: What our wastewater system might look like. Include note or graphic about potential Decentralized option.

Attachments:
- Trends identified by the State Water Board (see Stakeholders Strategic Planning Summit 3/12/07: Group Reports (page 14 and following)
- NWRI's comments
- The Language of Wastewater: Abbreviations

Side Note (or attachment): How big should it be - the basis of the assumptions used in sizing and doing the cost analysis. (Include note, e.g.... 'we recognize there may be questions regarding these assumptions and the impact that changes in sizing may have on cost. However, the TAC's efforts have been focused on evaluating which methods would best serve the community and ensure a reliable source of drinking water for the future. We trust that refinements in sizing will be made in the coming step of "value engineering." We believe that these assumptions have been applied across the board and, therefore, allow for an unbiased comparison of potential project alternatives.'

NOTES on how it might be released to the public:
- Brochure format for overview
- Complete Pros & Cons: Executive Summary with complete analysis as appendix
- Outreach: Town Hall meeting; TAC members (cross-group teams of two or three) at the Farmers Market; Paavo on the radio; participation contest to engage. (Make it fun.)
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LOS OSOS WASTEWATER PROJECT TECHNICAL ADVISORY COMMITTEE

San Luis Obispo County Department of Public Works

TAC

EXECUTIVE SUMMARY OF PRO/CON ANAYLSIS

Draft 7/16/07

COLLECTION	PROS	CONS
Gravity	▪ Lower O&M costs ($450,000/ YR) ▪ No access required on private property	▪ Higher construction costs ($69.4M- $77.7M) ▪ Higher on-lot costs born by homeowner ▪ Longer construction period ▪ Greater road impacts, requiring deep trenching ▪ Higher risk of archeological disturbance ▪ Higher risk of inflow, infiltration (I/I)
STEP/STEG	▪ Lower construction costs ($59.4M- $75.3M) ▪ Project (not homeowner) pays for most on-lot costs ▪ Provides primary treatment in tank, produces less solids, thereby reducing treatment and bio-solids processing	▪ If State loan is used, may required separate electrical connection (+$13.4M- $25.3M) ▪ Higher O&M costs ▪ Requires access on private property (front yard) to pump
TREATMENT		
Oxidation Ditch	▪ Small footprint (8 acres). ▪ Proven technology ▪ Lower O&M costs ($570,000) and energy usage (800,000 kWh/yr) with STEP/ STEG.	▪ Tertiary treatment required for agricultural or urban reuse (add $30,000 - $100,000). ▪ Costly odor control.
BIOLAC	▪ Small footprint (8-10 acres). ▪ Proven technology. ▪ 20% lower construction costs than Oxidation Ditch. ▪ Lower O&M costs ($550,000) and energy usage (800,000 kWh/yr) with STEP	▪ Higher O&M costs ($700,000) and energy usage (1,100,000 kWh/yr) with Gravity. ▪ Tertiary treatment required for agricultural or urban reuse (add $30,000 - $100,000).
Ponds	▪ Proven technology. ▪ Lower construction costs ($13.1M - $14.2M). ▪ Lower O&M ($510,000) and energy usage (600,000 kWh/yr) for both Gravity and STEP/ STEG. ▪ Reduced cost of dredging, sludge hauling (once every 20 years).	▪ Requires large footprint (16- 20 acres). ▪ May require Nitrification and Denitrification for disposal options (add 1.0M - $3.8M). ▪ Pond size prohibits odor control.
MBR	▪ High quality effluent meets Title 22 for agricultural or urban reuse. ▪ Small footprint. ▪ Proven technology ▪ Enclosed facility, controls odor.	▪ Highest construction costs ($55M). ▪ High O&M costs ($700,000/ yr). ▪ Highest energy demands (need more information). ▪ Heavy traffic and related cost of daily sludge hauling.
BIO-SOLIDS	**PROS**	**CONS**
Sub Class B	▪ Least expensive treatment required ▪ Can be upgraded to Class A	▪ Produces greatest mass of biosolids (4,056 tons/yr for Gravity; 1,014 tons/yr for STEP) ▪ Most expensive hauling charges ▪ Traffic nuisance of 4-5 hauling trips per week ▪ Risk of future substantial cost increases and more stringent regulations ▪ Requires land for solar drying (5.7 acres for gravity; 1.4 acres for STEP) ▪ Solar drying has high potential to create odors
Digested and/or Heat Dried	▪ Produces lower mass of biosolids ▪ Lower hauling charges	▪ Higher treatment costs ▪ Requires higher level of staff training

Class B	▪ Greater range of disposal options than Sub B	
Composted Class A	▪ Greatest range of disposal options ▪ Low mass of biosolids (1,327 tons/yr for gravity; 332 tons/yr for STEP)	▪ Requires reliable source of bulking agent ▪ Higher capital and O&M costs ▪ Risk of limited users
Facultative Ponds	▪	▪
SITING	**PROS**	**CONS**
Cemetery	▪ Proximity to LOVR reduces costs for road impacts. ▪ Adjacent to Giacomazzi – potential for alternative energy, expansion, upgrade, storage. ▪ Proximity to potential agricultural exchange/ in-lieu users and spray fields.	▪ Most of site is required for existing cemetery and its expansion; remaining acreage limits treatment and solids options, and restricts future upgrades and/or expansion. ▪ Questionable seller. ▪ Previously identified archeological site. ▪ Proximity to funeral events. ▪ Out-of-town location increases collection costs and piping back to Broderson. ▪ Environmental risk of crossing creek with wastewater.
Giacomazzi	▪ Proximity to LOVR reduces costs for road impacts. ▪ Available acreage allows for treatment and solids options. ▪ Willing seller. ▪ Low population density. ▪ Adjacent to Cemetery and Branin, allows options for storage, future upgrades, expansion, and alternative energy. ▪ Relative proximity to spray fields and potential agricultural exchange/ in-lieu users. ▪ It was the NWRI's unanimous opinion that an out-of-town site is better due to problematic issues with the downtown site.	▪ Out-of-town location increases collection costs and piping back to Broderson. ▪ Environmental risk of crossing creek with wastewater.
Branin	▪ Adjacent to Giacomazzi - potential for alternative energy, expansion, upgrade, storage. Excellent space for constructed wetlands storage. ▪ Proximity to potential agricultural exchange/ in-lieu users and spray fields.	▪ Only 8-10 usable acres; by itself, limits treatment options, future upgrades and/or expansion. ▪ Distance from LOVR increases cost of road impacts. ▪ Increased risk due to proximity to Warden Lake, sensitive habitat. ▪ Out-of-town location increases collection costs and piping back to Broderson. ▪ Environmental risk of crossing creek with wastewater.
Tri-W	▪ LOCSD currently owns property. ▪ Central location reduces collection costs. ▪ Proximity to Broderson for potential leach field and groundwater recharge. ▪ Much design and preliminary site work is already done. Environmental and archeological mitigation is already in place.	▪ Property is currently under litigation. ▪ Most expensive land considered (over $3M). ▪ Small site limits treatment options, incurring higher construction and O&M costs; also restricts future upgrades and/or expansion. ▪ Proximity to church, library, and high density residential areas. ▪ Serious road and traffic impacts in middle of town. ▪ Greatest distance from potential disposal on spray fields at Tonini.

		▪ High risks associated with system failure due to proximity to Bay. ▪ It was the NWRI's unanimous opinion that an out-of-town site is better due to problematic issues with the downtown site.
DISPOSAL	**PROS**	**CONS**
Level 1a	▪ High mitigation level (140 AFY) ▪ Low capital cost ($12.7M - $14.3M) ▪ Low O&M ($100k - $190k/ yr) ▪ Potential for addition mitigation with Ag Exchange	▪ Effluent disposed at spray field is lost to groundwater basin (680 AF). ▪ Slow ramp-up time to develop agreements with farmers ▪ Requires land acquisition for spray field (170 acres)
Level 1b	▪ Comparable capital cost ($12.8M - $15.6M) ▪ Eliminates risk of farmers' participation	▪ Lowest mitigation level (90 AFY) ▪ Greatest loss of effluent disposed at spray field to groundwater basin (1190 AF). ▪ Highest land acquisition costs (280 acres) ▪ Fails to utilize opportunity for cemetery and ag reuse
Level 2a	▪ Highest mitigation level (240 AFY) without purveyor participation ▪ Potential to increase mitigation through Ag Exchange (+207 AF) ▪ Comparable capital cost to Level 1 ($13.2M - $13.9M) ▪ Significantly reduced land acquisition for spray field (70 acres)	▪ Effluent disposed at spray field is lost to groundwater basin (232 AF). ▪ Higher O&M ($400k - $440k) ▪ Cost to transport effluent to town
Level 2b	▪ Requires less storage (30 AF) ▪ No ramp-up time required as for ag reuse	▪ Higher capital cost ($14.9M - $16.7M) than Level 2a with less Mitigation (190 AFY) ▪ High O&M ($440k - $530k) ▪ Fails to utilize opportunity for ag reuse ▪ Effluent disposed at spray field is lost to groundwater basin (742 AF). ▪ Cost to transport effluent to town ▪ Requires greater land acquisition for spray field (180 acres)
Level 3a	▪ Highest mitigation level (600 AFY) ▪ Maximizes opportunity for ag reuse ▪ O&M costs less than $400k/ yr ▪ Lowest land acquisition for spray field (10 acres)	▪ Higher capital costs ($25.6M - $27.3M) ▪ Slow ramp-up period to develop agreements with farmers ▪ Cost to transport effluent to town

LOS OSOS WASTEWATER PROJECT TECHNICAL ADVISORY COMMITTEE

San Luis Obispo County Department of Public Works

TAC

COLLECTION SYSTEMS

Gravity Collection System	STEP/STEG (Septic Tank Effluent Pump) Collection System
BEST for: Lower O&M costs ($450,000/ YR). No access required on private property	**BEST** for: Lower construction costs ($59.4M- $75.3M); Project (not homeowner) pays for most on-lot costs; Provides primary treatment in tank, produces less solids, thereby reducing treatment and bio-solids processing
BUT: Higher construction costs ($69.4M- $77.7M); Higher on-lot costs born by homeowner; Longer construction period; Greater road impacts, requiring deep trenching ; Higher risk of archeological disturbance; Higher risk of inflow, infiltration (I/I)	**BUT**: If State loan is used, may required separate electrical connection (+$13.4M- $25.3M); Higher O&M costs; Requires access on private property (front yard) to pump

TREATMENT ALTERNATIVES

Oxidation Ditch	Partially Mixed Facultative Ponds
BEST for: Small footprint (8 acres). Lower O&M costs ($570,000) and energy usage (800,000 kWh/yr) with STEP/ STEG. **BUT**: Tertiary treatment required for agricultural or urban reuse (add $30,000 - $100,000). Costly odor control.	**BEST** for: Lower construction costs ($13.1M - $14.2M). Lower O&M ($510,000) and energy usage (600,000 kWh/yr) for both Gravity and STEP/ STEG. Reduced cost of dredging, sludge hauling (once every 20 years). **BUT**: Requires large footprint (16- 20 acres). May require Nitrification and Denitrification for disposal options (add 1.0M - $3.8M). Pond size prohibits odor control.
BIOLAC (or similar technology)	**MBR**
BEST for: Small footprint (8-10 acres).; Proven technology.; 20% lower construction costs than Oxidation Ditch.; Lower O&M costs ($550,000) and energy usage (800,000 kWh/yr) with STEP **BUT**: Higher O&M costs ($700,000) and energy usage (1,100,000 kWh/yr) with Gravity. Tertiary treatment required for agricultural or urban reuse (add $30,000 - $100,000). **PRICE**:	**BEST** for: High quality effluent meets Title 22 for agricultural or urban reuse. Small footprint; Enclosed facility, controls odor. **BUT**: Highest construction costs ($55M). High O&M costs ($700,000/ yr). Highest energy demands (need more information). Heavy traffic and related cost of daily sludge hauling. **PRICE**:

BIO-SOLIDS

Sub Class B	Composted Class A
BEST for: Least expensive construction cost and low acreage requirements. Can be upgraded in future. **BUT**: Most restrictive disposal option. Produces largest volume of sludge of poorest quality, requiring expensive hauling; has largest carbon footprint; and has risk of increased costs and more stringent regulations in the future.	**BEST** for: Least restrictive, sustainable disposal option; minimal carbon footprint; best regional solution. **BUT:** Higher capital and annual O&M costs; larger acreage requirements; risk of limited supply of bulking agent; risk of sufficient users.

Class B: Digested or Heat Dried	Facultative Ponds
BEST for: Reduced volume of sludge; low acreage requirements; easily upgraded to Class A. **BUT**: Higher O&M and carbon footprint; requires hauling (less often than Sub Class A)	**BEST** for: Least restrictive, sustainable disposal option; minimal carbon footprint; lowest O&M; minimal odor; no hauling on a regular basis; dredging and hauling every 15-20 years. **BUT:** Requires larger acreage; may require additional nitrate removal; least flexible for water exchange

SITES

Tri-W	Giacomazzi
BEST for: Central location reduces collection costs. Proximity to Broderson for potential leach field and groundwater recharge. Much design and preliminary site work is already done. LOCSD currently owns property. Environmental and archeological mitigation is already in place. **BUT**: Property is currently under litigation. Most expensive land considered (over $3M). Small site limits treatment options, incurring higher construction and O&M costs; also restricts future upgrades and/or expansion. Proximity to church, library, and high density residential areas. Serious road and traffic impacts in middle of town. Greatest distance from potential disposal on spray fields at Tonini. High risks associated with system failure due to proximity to Bay. It was the NWRI's unanimous opinion that an out-of-town site is better due to problematic issues with the downtown site. **VALUE:**	**BEST** for: Proximity to LOVR reduces costs for road impacts.; Available acreage allows for treatment and solids options.; Willing seller. Low population density. Adjacent to Cemetery and Branin, allows options for storage, future upgrades, expansion, and alternative energy. Relative proximity to spray fields and potential agricultural exchange/ in-lieu users. It was the NWRI's unanimous opinion that an out-of-town site is better due to problematic issues with the downtown site. ▪ **BUT**: Out-of-town location increases collection costs and piping back to Broderson. Environmental risk of crossing creek with wastewater. **PRICE:**
Cemetery	**Branin**
BEST for: Proximity to LOVR reduces costs for road impacts. Adjacent to Giacomazzi – potential for alternative energy, expansion, upgrade, storage. Proximity to potential agricultural exchange/ in-lieu users and spray fields. **BUT**: Most of site is required for existing cemetery and its expansion; remaining acreage limits treatment and solids options, and restricts future upgrades and/or expansion. Questionable seller. Previously identified archeological site. Proximity to funeral events. Out-of-town location increases collection costs and piping back to Broderson. Environmental risk of crossing creek with wastewater. **PRICE:**	**BEST** for: Adjacent to Giacomazzi - potential for alternative energy, expansion, upgrade, storage. Excellent space for constructed wetlands storage. Proximity to potential agricultural exchange/ in-lieu users and spray fields. **BUT:** Only 8-10 usable acres; by itself, limits treatment options, future upgrades and/or expansion. Distance from LOVR increases cost of road impacts. Increased risk due to proximity to Warden Lake, sensitive habitat. Out-of-town location increases collection costs and piping back to Broderson. Environmental risk of crossing creek with wastewater. **PRICE:**

LOS OSOS WASTEWATER PROJECT
TECHNICAL ADVISORY COMMITTEE

San Luis Obispo County Department of Public Works

TAC

DISPOSAL ALTERNATIVES

Spray Fields	**Urban Reuse**
BEST for: Capacity to handle full effluent flow; likely that tertiary treatment and denitrification would be required. **BUT**: Requires large acreage; provides no mitigation for seawater intrusion; high construction and O&M costs; requires winter storage; possible loss of agricultural viability.	**BEST** for: Cost of piping to Cemetery for reuse is minimal due to close proximity to out-of-town treatment plant. **BUT**: Cost of piping back to town is high compared to constructing upper aquifer well on site; requires tertiary treatment, which increases treatment capital costs and O&M; may require nitrification/ denitrification treatment; limited reuse capacity.
Broderson Leachfield **BEST** for: Potential for recharge of lower aquifer; tertiary treatment not required **BUT**: High cost to develop site and pipe effluent from out-of-town treatment site; high land value; high cost of environmental mitigation; requires full nitrification/ denitrification of effluent; potential loss of sensitive habitat.	**Storage in Constructed Wetlands** **BEST** for: community enhancement; storage is required for all disposal options. **BUT**: Requires acreage; unknown construction and O&M costs.
Agricultural Reuse **In-Lieu** (Farm stops pumping water, reuses treated water) **BEST** for: Significant capacity; reduces agricultural pumping from lower aquifer; proximity to out-of-town treatment plant. **BUT**: Cost of piping to farms; requires tertiary treatment and some nitrification/ denitrification; requires winter storage; slow ramp-up time to develop agreements with farmers.	**Agricultural Reuse** **Exchange** (Farm reuses treated water and sends pumped water to town) **BEST** for: **BUT**:

COLLECTION COST COMPARISON

Draft 6/21/07

	Gravity	STEP/ STEG
Total Construction and Homeowner Costs (1) (2)	**$80.3M - $89.7M**	**$64.8M - $81.2M** (3)
Annual Operations & Maintenance Costs	**$450,000** (4)	**$745,000** (4)

(1) Not including separate electrical premium.
(2) Homeowners' on-lot costs are not part of gravity collection project costs, but are included here for comparison purposes only.
(3) Additional research is required to determine if STEP costs for overhead, profit and taxes are already included. If so, the total construction costs would be lower by $10.6M to $13.2M.
(4) STEP's septic hauling costs ($150k) are included here. Gravity's hauling costs are included in Bio-solids, Sub Class B costs.

TREATMENT COST COMPARISON

Draft 6/15/07

Treatment Technology	Total Capital Costs Level 2 Treatment		Annual O&M Level 2 Treatment		Energy Requirements (Kilowatt hours/ year)		Acerage Required	
	Gravity	STEP	Gravity	STEP	Gravity	STEP	Gravity	STEP
Oxidation Ditches	$22.6M	$21.7M	$720,000-$790,000	$60,000-$760,000	900,000	800,000	8	8
BIOLAC	$19.9M	$19.4M	$730,000-$800,000	$670,000-$740,000	1,100,000	800,000	10	8
Facultative Ponds	$22.8M	$21.7M	$695,000-$765,000	$695,000-$765,000	600,000	600,000	20 (4)	20 (4)
MBR – Tri-W	$55.0M	NA	$700,000	NA	***Numbers needed***	NA	4	NA

Assumptions:
(1) Denitrification needed for 0.8 MGD side stream at peak winter flow.
(2) Full 1.4M flow treated to tertiary level for agriculture, urban reuse, and future regulations.

NOTE: Report uses 1.4mgd in all final cost calculations. STEP costs should be recalculated based on 1.2mgd.

BIO-SOLIDS Alternatives	Capital Costs		Annual O&M		Biosolids Produced Tons/ year		Acres Required for Solar Drying	
	Gravity	STEP	Gravity	STEP	Gravity	STEP	Gravity	STEP
Sub Class B	$1.9M - $2.4M	$1.1M - $1.7M	$430k - $470k	$190k - $270k	4,056	1,014	5.7	1.4
Digested Class B	$4.2M - $4.7M	$2.4M - $3.4M	$420k - $460k	$220k - $310k	3,103	776	4.4	1.1
Heat Dried B	$5.4M - $6.2M	$3.1M - $4.8M	$600k - $640k	$340k - $480k	1,043	261		
Composted Class A	$3.4M - $4.2M	$2.0M - $3.3M	$600k - $635k	$350k - $505k				
Facultative Ponds	-0-	-0-	$ 40k - $ 50k	$ 30k - $ 40k	(1)	(1)		

(1) Biosolids will be dredged and hauled approximately every 20 years. STEP produces approximately 80% less solids than Gravity.

COST/ BENEFIT ANALYSIS OF EFFLUENT REUSE/ DISPOSAL ALTERNATIVES

Draft 7/12/07

Reuse/Disposal Level	Capital Costs	Annual O&M Costs	Land (Spray field)	Storage	Seawater Intrusion Mitigation
Level 1a: Full Ag Reuse	$12.7M - $14.3M	$100k - $190k	170 acres = $5.1M	290 AF	140 AFY
Level 1b: No Ag Reuse	$12.8M - $15.6M	$125k - $275k	280 acres = $8.4M	210 AF	90 AFY
Level 2a: Full Ag Reuse	$13.2M - $13.9M	$400k - $440k	70 acres = $2.1M	140 AF	240 AFY
Level 2b: No Ag Reuse	$14.9M - $16.7M	$440k - $530k	180 acres = $5.4M	30 AF	190 AFY
Level 3a: With Full Ag Use and Broderson	$25.6M - $27.3M	< $400k (1)	10 acres = $0.4M	115 AF	

(1) According to County staff, the O&M number in the Fine Screen needs to be revised downward.

Proposed Pro-Con Analysis Format

By Rob Shipe

7/16/07
2 pages

We have to explain this process to folks who will be voting on the 218 but have not paid any attention to the process thus far. I think the easiest way to do that will be in story format.

Start with the collection system and follow the pipes... It might be a little lengthy, but it can summarize the points the TAC feels are most critical for those who have no clue what a Wastewater Collection and Treatment System would entail.

A VERY brief example of how the report might look is included below:

The TAC is looking at various project alternatives proposed by the County of SLO for the treatment of wastewater within the community of Los Osos. A Community Wastewater Collection and Treatment System consists of five parts, Collection System, Site, Treatment, Effluent and Solids. The waste is collected via pipes (Collection System) and brought to a location (Site) where it is processed (Treatment). After treatment, the liquid (Effluent) is disposed or reused and the waste (Solids) are either removed or treated further.

The two Collection systems we are looking at are Gravity Collection and STEP.... Gravity is this, Step is that. The Gravity system has these pluses and minuses and STEP has it's own....

Once the Wastewater is collected, it must be delivered to a site. Tri-W is here, Giacomazzi is there....

At the site there are several treatment options including Ponds, Biolac and Ox ditch. At the Tri-W site, only the currently designed MBR is an option.

After treatment, the treated effluent needs to be either disposed of or reused. Putting water at Broderson will do this, discharge in spray fields will do that and AG Exchange or In Lieu will do the other.

The remaining solid waste can either be hauled away or composted on site.

Over the coming months, The County will continue to work towards narrowing the scope of possible projects as we move to the Community Advisory Survey which will be used by the BOS to help guide them in choosing the right project for Los Osos.

Attached is a chart that outlines the Pro's and Con's of each option that was prepared by the TAC. If you have any questions, call John Waddell ;^)

The Following is an outline of the information that would be included:

I. Introduction
   A. County
      1. AB 2701
      2. Process description
   B. TAC
      1. Who we are
      2. What's our mission
   C. Overview
      1. Collection
      2. Site
      3. Treatment
      4. Effluent
      5. Solids

II. Collection
   A. Gravity
      1. Description
      2. Pros
      3. Cons
   B. STEP
      1. Description
      2. Pros
      3. Cons

III. Site
   A. Giacomazzi/ Branin/ Cemetery
      1. Description
      2. Pros
      3. Cons
   B. Tri- W
      1. Description
      2. Pros
      3. Cons

IV. Treatment
   A. Bio-Lac
      1. Description
      2. Pros
      3. Cons
   B. Facultative Ponds
      1. Description
      2. Pros
      3. Cons
   C. MBR
      1. Description
      2. Pros
      3. Cons
   D. Oxidation Ditch
      1. Description
      2. Pros
      3. Cons

V. Effluent
   A. Level 1
      1. Description
      2. Pros
      3. Cons
   B. Level 2
      1. Description
      2. Pros
      3. Cons
   C. Level 3
      1. Description
      2. Pros
      3. Cons

VI. Solids
   A. Sub Class B Hauling
      1. Description
      2. Pros
      3. Cons
   B. Digested or Dried Class B
      1. Description
      2. Pros
      3. Cons
   C. Composted Class A
      1. Description
      2. Pros
      3. Cons

VII. Conclusion
   A. What's next
      1. 218 Vote
      2. Community Advisory Survey
      3. Choosing a project.
   B. More information
      1. See Appendix for complete Pro-Con Analysis
      2. Come to a meeting
      3. Contact the County.