



COBURG CITY COUNCIL

DEPARTMENT: Public Works

TOPIC: Wastewater Project
STEP Sewers and Trip to Yelm, WA

Meeting Date: November 11, 2006
Contact: Jack Detweiler – Kennedy/Jenks Consultants
Contact Telephone Number: 338-8135

A revised wastewater alternative was presented at the October City Council meeting. The revised alternative consisted of a STEP sewer system, advanced wastewater treatment, effluent reuse and winter discharge to Muddy Creek (STEP-Reuse Alternative). The STEP-Reuse Alternative offers the advantages of lower cost and environmental benefits. It also avoids difficulties associated with obtaining a discharge permit to the McKenzie River. However, there are concerns regarding the cost for operating a STEP sewer system and how a STEP sewer may impact Coburg residents. The City of Yelm, WA was given as an example of a community with a similar wastewater system consisting of STEP sewers and effluent reuse.

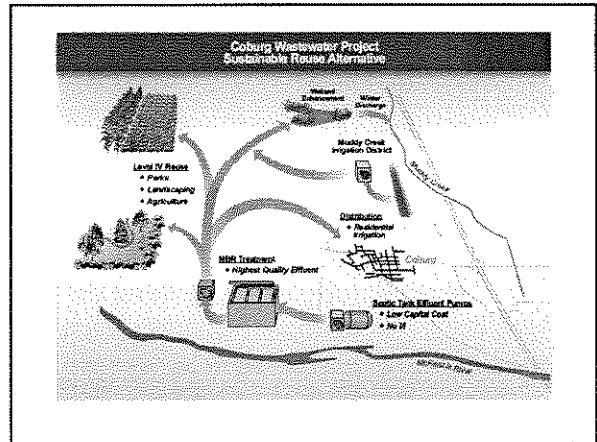
A presentation will be given at the November Council Meeting outlining information gathered during a trip to Yelm, WA. The presentation will address STEP sewer operating experience, effluent reuse experience, and issues to be addressed for implementing the STEP-Reuse alternative in Coburg.

A copy of the presentation slides is included in the council packet.

ORIGINAL

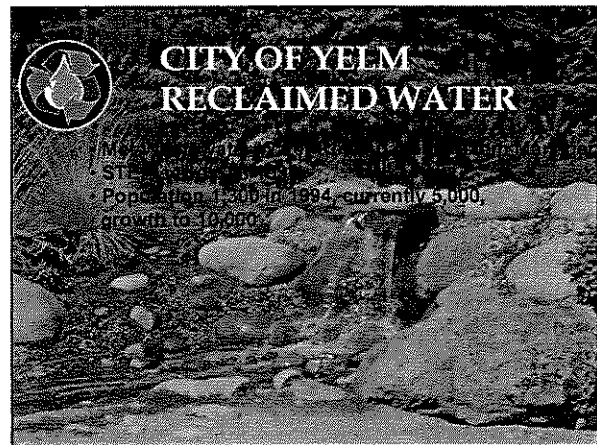
Coburg Wastewater Project

Reuse Alternative Update
November 14, 2006



Agenda

- Recap Reuse Alternative
- Trip to Yelm, WA
- Alternative Comparison for Coburg
- Steps Toward Implementation



ORIGINAL

Yelm's Objectives

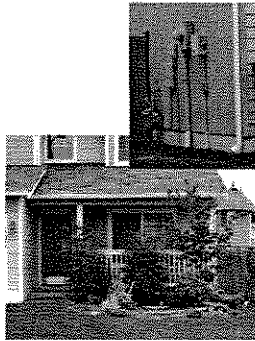
- Environmentally responsible
 - Groundwater quality, nitrates
 - Discharge restrictions
- Limited water resources
- Extends life of existing water rights
- Source of community pride

STEP O&M Experience

- Visit STEP tank every 3 years
- Identify problem tanks
- Pump life 10 years
- Float switches most common problem
- Pump tanks 5 years
- Call outs
 - 10 to 20 per month, only 5 required maintenance
 - Storage volume available

STEP Sewers

- City responsible for STEP tank O&M
- Access agreements
- Preventative maintenance
- Leak testing
- No I/I



Yelm Wastewater Staff

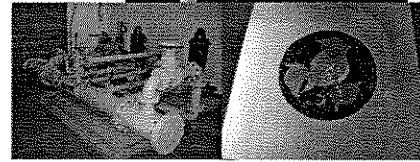
- Inspector for new connections
 - 1 new house each day
- STEP tank service person
- Maintenance person at WWTP
- Manager - WWTP lab and operations

STEP Sewer Advice

- Don't connect STEP sewer to gravity sewer
- Careful with multiple houses on common STEP tank
- Locate STEP tanks for easy access
- Use two compartment septic tanks
- Grease main cause of problems

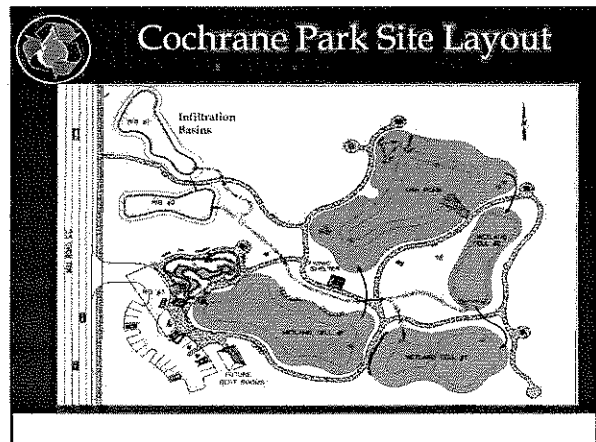
Water Reuse

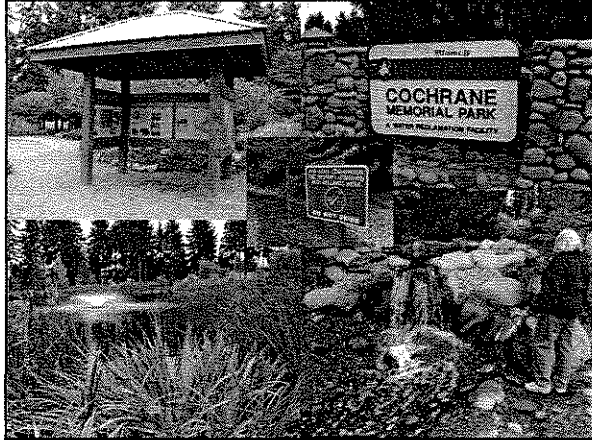
- Schools
- Churches
- Parks
- Water park
- Street landscaping
- Future golf course
- Few private residential, cost
- Charge 80% of water rate



Local Experience

- Septic tanks with pumped drain fields
- 23 septic tanks with pumps in Coburg
- 10 years old
- Float switch problems





Annual Operating Cost

	STEP-Reuse	Gravity-Discharge
Collection	\$162,000	\$67,000
Treatment	\$231,000	\$241,000
Reuse or Discharge	\$39,000	--
Admin	\$65,000	\$65,000
Total	\$497,000	\$373,000

- ### Coburg Alternatives
- Alternative Comparison
 - Economics
 - Implementation
 - Schedule
 - Council Action

Economic Comparison

	STEP – Reuse	Gravity - Discharge
Capital	\$13.9 M	\$17.3 M ⁽¹⁾
Annual O&M	\$497,000/yr	\$373,000/yr
Present Worth ⁽²⁾	\$17.5 M	\$18.7 M

1. Pipeline to Willamette R and environmental work will increase capital cost.
 2. Present worth computed at 5% discount rate, 20-year period, less residual value of asset.

Alternative Comparison

	STEP-Reuse	Discharge
Economics	Lower cost	Higher cost
Discharge permit amend.	Muddy Cr.	Willamette R
Facilities Plan amend.	Yes	No
Environmental studies	Yes	Yes
Reuse plan	Yes	No
RUS Funding amend.	Yes	Yes
Homeowner access agreements	Yes	No

Council Action

- Proceed with:
 - Public Meeting Nov 28th
 - DEQ Presentation
 - Environmental work for Muddy Cr.
 - Funding sources

- Authorization of STEP-Reuse alternative
Dec 12th Council Meeting

Schedule STEP and Reuse



ORIGINAL