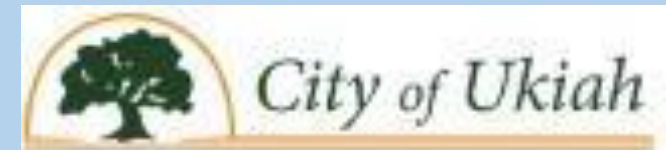


City of Ukiah Recycled Water Project

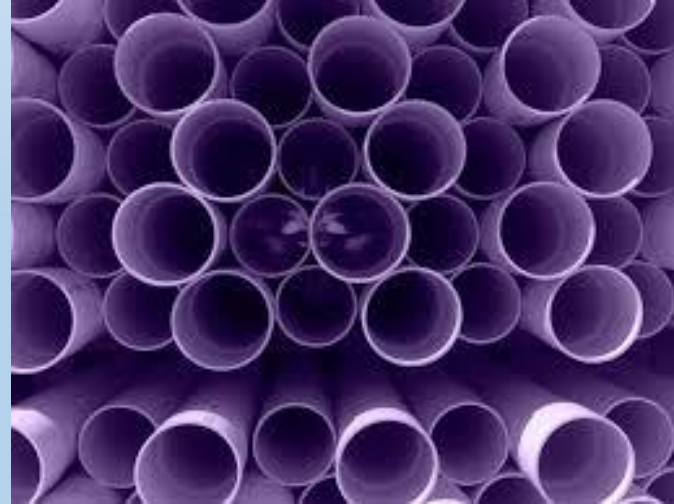
Ukiah Valley Sanitation District Update

April 21, 2016



Overview

- Definitions
 - Recycled Water
 - Recycled Water Uses
- Effluent Disposal - Current Practices
- Importance of a Recycled Water System
- Project Description
- Project History
- Project Funding
- Next Steps
- Discussion and Questions



What is Recycled Water?

- Recycled Water has been previously referred to as “Reclaimed Water” and “Purple Pipe Water.”
- Recycled Water meets CA Title 22 requirements of the California Code of Regulations and Federal Water Quality Laws.
- Recycled Water is produced from the Wastewater Treatment Plant (WWTP) using Tertiary Treatment through the Advanced Water Treatment System (AWT).

Ukiah
WWTP



AWT



Recycled Water Uses



Irrigation of landscapes:

- Golf Courses
- Schools
- Cemeteries
- Parks
- Ball Fields

Irrigation of crops:

- Vineyards
- Orchards
- Row Crops, ie: fruits and vegetables

Frost Protection

Construction use:

- Dust control
- Concrete Mixing

Effluent Disposal- Current Practices

There are two types of effluent generated at the WWTP:

1) **Secondary Effluent** - this effluent is discharged to the percolation ponds.

2) **Tertiary Effluent** - this effluent is discharged to the Russian River during wet weather months. Discharge “Season”, as permitted by the North Coast Regional Water Quality Control Board through the City’s National Pollutant Discharge Elimination System (NPDES) Permit, is from October 1st through May 14th of each year. Effluent is discharged at a rate not to exceed 1% of the flow of the River as measured at the Hopland Gauging Station.

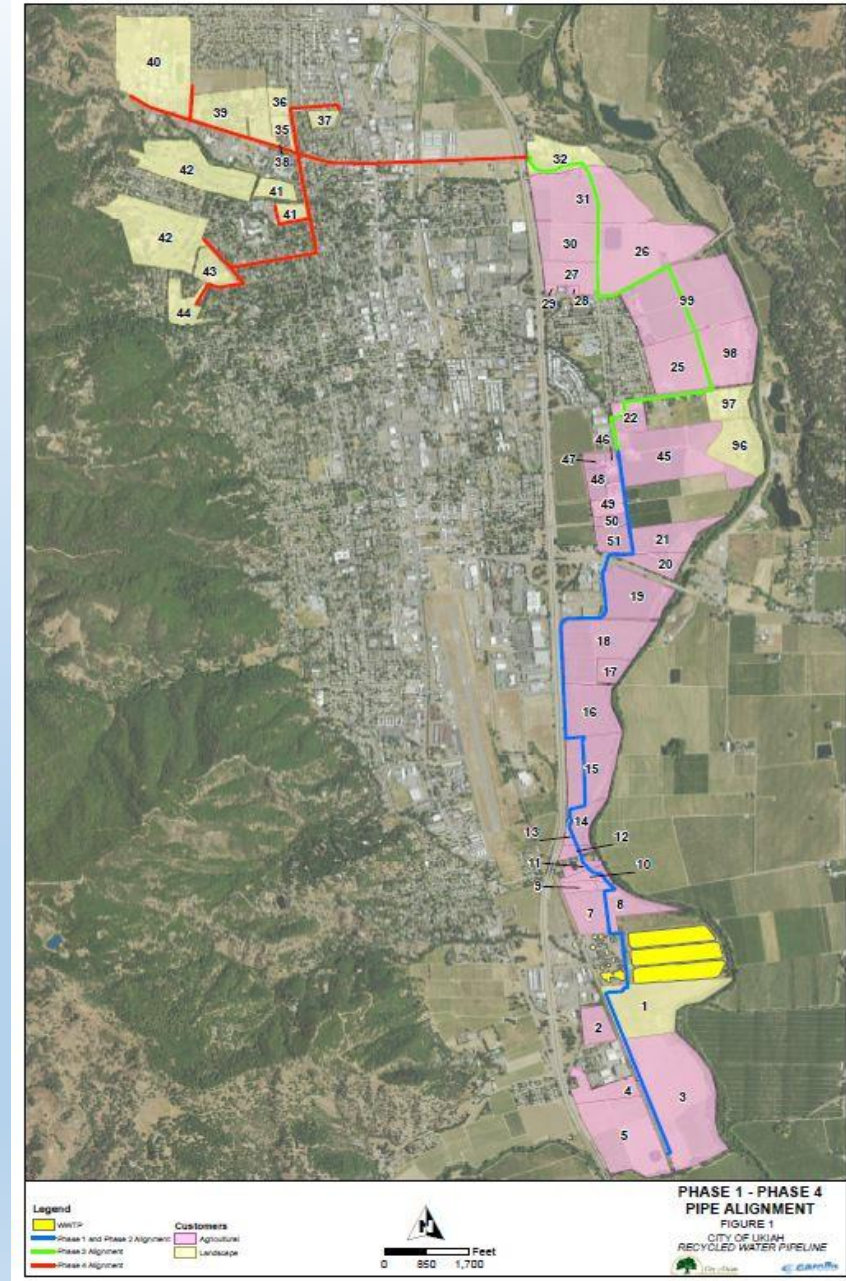
Importance of a Recycled Water System

The best option for future, long-term effluent disposal is the development of a recycled water system. This is due to:

- 1) NCRWQCB staff has expressed concern regarding continued long term use of the percolation ponds due to their uncertainty regarding the documented hydraulic dis-connection between the ponds and the Russian River (River).
- 2) Restrictions continue to become more stringent and costly in order to stay in compliance with the NPDES Permit (e.g. CEC's). The restrictions the NCRWQCB is currently concerned with are Nitrate and Ammonia final effluent limits when discharging to the River. Complying with these limits could result in another upgrade to the WWTP in the amount of approximately \$22,000,000.
- 3) This project will reduce water offset from the River for both Agricultural and Municipal purposes and will help to protect the beneficial uses of the River.

Project Description

- The project is comprised of 4 phases which begin south of the WWTP and ultimately end at the North end of Ukiah serving the parks, schools, cemetery and golf course.
- Signed User Agreements for over 1400 AFY



Project History

- **September 1, 2010** - Council Approved Request for Proposals (RFP) for Engineering Services for the preparation of a Recycled Water Master Plan.
- **October 2, 2010** - 5 RFPs were received and reviewed. Interviews were held with 2 firms and Carollo Engineers was selected by the review committee.
- **December 15, 2010** - City Council awarded the Contract to Carollo Engineers.
- **February, 2011**- Staff began working on the Master Plan with Carollo Engineers, Mendocino County Farm Bureau, Ukiah Valley Sanitation District and the Russian River Flood Control District with other stakeholder involvement.
- **August 12, 2011**- City received a Facilities Planning Grant from the State Water Resources Control Board (SWRCB) which reimbursed 50% of the cost to prepare the Master Plan (hereinafter called “Recycled Water Feasibility Study”).
- **December 7, 2011**- City Council received an update on the progress of the Feasibility Study. Once data was gathered, stakeholder workshops were held and the alternatives were developed.
- **June 21, 2012**- Contract with Carollo Engineers was amended to include CEQA-Plus Initial Study.
- **June 5, 2013** - City Council adopted a resolution approving a Mitigated Negative Declaration for the Recommended Alternative of the Recycled Water Feasibility Study.
- **Summer 2013 and 2014**- Prop 84 Grant Funds awarded in the amount of \$2,090,191 to begin Phases 1 and 2
- **May 28, 2014** - City Council Awarded a contract to Carollo Engineers for the design of Phases I and II of the Recommended Alternative.
- **August 31, 2015** – SWRCB approves Change Petition WW0082 changing Purpose and Place of Use for Treated Wastewater
- **November 14, 2015**- City applies for and receives Prop 1A Funds totaling \$35,560,000 for Phases 1-3
- **March 16, 2016**- City amends agreement (\$697,629) with Carollo to add Design of Phase 3 and to complete a Water Balance Model

Project Funding

- Funds committed to date:
 - \$1,543,531 Design, CEQA and Permitting Costs
- Source of Funds:
 - City Sewer Capital Fund 844
- Total Grants received:
 - \$2,090,191- Prop 84
 - \$9,996,000- Prop 1A
- Financing Received- SRF Loan at 1% Interest
 - \$25,564,000
 - Annual Debt Service- \$1,157,904
 - 1996 AWT Loan paid off April 2016- \$425,649
 - Net Debt Service- \$732,255 (10% of total Wastewater Operating Budget)

Next Steps

- **Design Completion- Summer 2016**
- **Construction Bid Documents Released- Late Summer 2016**
- **Construction Project Begin- Fall 2016**
- **Construction Completion- Fall 2017**

Questions and Discussion