The DIXON PIPELINE

City of Dixon
Wastewater Treatment Facility Newsletter
WINTER 2015

CONSTRUCTION IS UNDERWAY AT THE WASTEWATER TREATMENT FACILITY

On July 9, 2015 the City of Dixon celebrated the groundbreaking of its Wastewater Treatment Facility Construction Project. Dixon's old wastewater treatment facility was outdated, unsafe and not able to meet permit requirements set by the Regional Water Quality Control Board. The $28 million dollar project, once complete, will provide safe, reliable service to Dixon residents and businesses now and for future generations.

PLANNING FOR CURRENT AND FUTURE NEEDS

The City of Dixon has worked thoughtfully with its engineering team to design a wastewater treatment plant that can withstand the test of time. It includes provisions for upgrades to address future regulatory water reuse needs, if and when they become necessary. Upgrades will also provide capacity for current and entitled projects within the city.

Construction Efforts Run at Full Speed

Crews are wasting no time making headway with the aggressive 18-month construction schedule. "Our crews are moving quickly to accomplish 40% of the work by the end of 2015. So far, conditions have been optimal. Tasks are running smoothly and staying on track, which is primarily due to the cooperation between project team members from the City, Stantec and Overaa," stated Ben Evans with Overaa Construction.

Crews smooth wet concrete for the new water quality lab floor

Rebar and forms for the clarifiers concrete slabs

Predawn concrete pour at oxidation ditch

Crews install rebar and build forms

PROGRESS PIPELINE

JULY 2015

- Groundbreaking ceremony marks start of construction
- Excavation for oxidation ditches and clarifiers
- Subgrade preparations, formwork and reinforcing steel for concrete slabs

AUGUST 2015

- Three large concrete pours for oxidation ditch slab
- Excavation for sludge stabilization basins
- Underground pipe and conduit placement and footing formwork at new headworks building

SEPTEMBER 2015

- Oxidation ditch and clarifier slabs complete, began pouring concrete walls
- Formwork for lower walls of headworks building
- Concrete footing, underground pipe and electrical for operations building

OCTOBER 2015

- Bypass and demolish old headworks structure
- Concrete walls for oxidation ditch, clarifiers and headworks building
- Prepare site for wet weather conditions

Activated Sludge Contributes to Water Conservation

One significant Wastewater Treatment Facility upgrade is abandoning 13 treatment ponds and moving to a more efficient activated sludge process. This process directly contributes to water conservation. In fact, about a half of million gallons of pure water per day that would have been lost to evaporation from the previously used ponds will now be effectively conserved. That's the equivalent of what 1,200 average homes with a family of four uses daily!

Instead of evaporating, this pure water will now be used to recharge the local aquifer, which increases the quantity and quality of local groundwater and helps to maintain the groundwater flow towards the Delta.

WHAT IS ACTIVATED SLUDGE?

Activated sludge is a common process where bacteria break down organic materials. It will prevent salinity buildup and is more effective at removing nitrates and other pollutants.

NOTEWORTHY

It took more than 100 concrete trucks to pour over 1,000 cubic yards of concrete needed for the first pour of the oxidation ditch foundation.

UPCOMING NEWS

The third of four incremental rate increases will go into effect April 2016. Residents currently paying $61.26 per two months ($30.63/mo based upon 8 ccf winter water usage) can expect to pay $77.18 per two months ($38.59/mo).

FAST FACTS

The upgrades at Dixon's Wastewater Treatment Facility are no small matter. By the time construction concludes, crews will HAVE:

- Poured approximately **18,000 tons of concrete**. That's enough concrete to build a 4-foot wide sidewalk that spans 35 miles!
- Installed approximately **20 miles of pipe**. If laid end to end, the pipe would stretch from Dixon to Sacramento!
- Excavated and move **60,000 tons of dirt and rock**. That much dirt and rock weighs as much as 10,000 elephants!

The upgraded plant will process up to **1.9 million gallons per day**. That's the equivalent of nearly 6 acre-feet, which is enough to fill a pool the size of football field with nearly four and a half feet of water each day!

DIXON CALIFORNIA

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