RECLAMATION Managing Water in the West

Flatiron Water Delivery Pipe or Penstock Recoating

Project Description

Two water delivery pipes, or penstocks, in service since 1954, drop water down 1,064 feet through a mile of pipeline to the Flatiron hydro-electric power plant, 50 miles northwest of Denver, Colo. The Flatiron Penstocks are an integral part of the Colorado-Big Thompson water diversion and delivery project, making possible the generation of hydro-electric power as well as the provision of supplemental water to 840,000 people in northeastern Colorado.



The protective coating on the inside and outside of the pipes is more than 50 years old and in need of replacement. American Recovery and Reinvestment Act of 2009 funds will be used to recoat the pipeline including removing the old paint from the exterior and interior of the pipes and safely handling and disposing of it. It is lead-based and the packing associated with the pipes might contain asbestos. Once the coating and packing is safely removed, a new coating and packing will be applied. The recoating work also includes installing ultrasonic flow meters on the pipes to improve water accounting and power plant efficiency.

Project Benefits

Completing the recoating on the pipes will:

- Reduce long-term operational costs by utilizing a more efficient and temperature resistant paint product.
- Maintain the structural integrity and increase reliability by extending service life an additional 50 years.
- Continue to provide 94.5 Megawatts of low cost Federal power at the Flatiron Hydroelectric Plant
- Improve water accountability and power plant efficiencies, saving tax payer dollars.

Project Status

Contractor Abhe & Svoboda has begun work on the Flatiron Penstocks behind Carter Lake reservoir west of



Loveland, Colo. Residents and visitors to the area will notice trucks, equipment and tents along the penstocks over the next several months.

Budget Information

Recovery funding: \$14,735 million

For more information

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