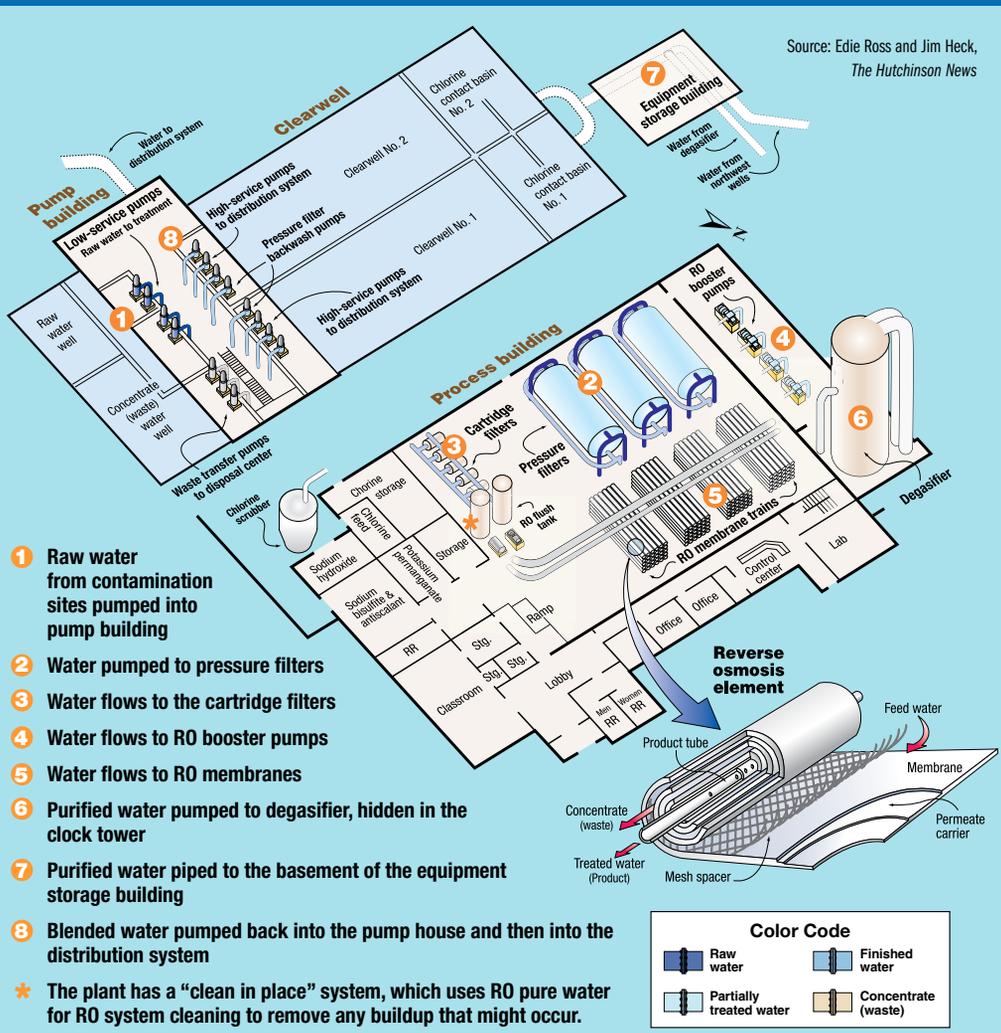


Finished Water

A PHOTOGRAPHIC PROFILE



Pretreatment for Hutchinson's new water treatment plant (top) is provided by three dual-cell horizontal pressure filters (middle). RO consists of four trains (bottom), two-stage units with a 24/12 array—252 elements per train.



RO WATER TREATMENT PLANT SOLVES VOC CONTAMINATION PROBLEM

Faced with a local public water supply well contaminated with volatile organic compounds (VOCs), Hutchinson, Kan., city officials negotiated a cooperative cleanup solution with local industry and the Kansas Department of Health and Environment for the 1,240-acre groundwater contamination site. Going on-line in April 2009, a new reverse osmosis (RO) system, combined with wellfield water, now supplies the community with softer water and reclaims previously unusable water.

PROJECT SPECIFICS

Project Name: Hutchinson 4th and Carey

Groundwater Remediation and Reverse Osmosis Water Treatment Project

Operator/Contractor: City of Hutchinson/Walters-Morgan Construction

Treatment Plant Designer: Professional Engineering Consultants

Water Source: Groundwater from the Equus Beds Aquifer

Project Cost: \$34.5 million (\$17.7 million for the RO water treatment facility, \$4.1 million for two deep disposal wells, and \$12.7 million for pipelines and remediation systems)

Funding Sources: \$13.3 million from industry for contamination remediation, \$3.4 million USEPA grant, and \$17.8 million

from State Revolving Loan funds and water utility capital improvement program

Service: Design capacity of 10 mgd. Contamination remediation wells and municipal supply wells provide source water to the treatment plant. Water is provided to customers with an optimum goal of 60 percent RO-treated water blended with 40 percent municipal wellfield water. The final water product undergoes pH adjustment for corrosion control followed by disinfection with chlorine gas. RO process concentrate reject water (about 25 percent) is disposed of through a Class I Under-ground Injection Control well system.

Staff Size: 7, with 5 operators

PHOTOGRAPHS: CITY OF HUTCHINSON