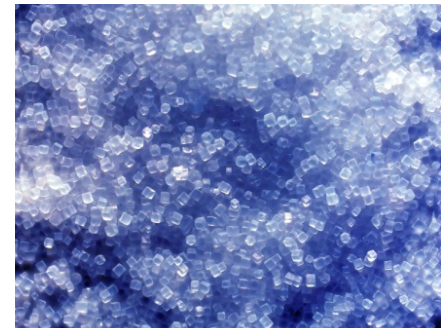




EWM

ENVIRO WATER MINERALS COMPANY



UPDATE ON THE EL PASO FULL RECOVERY DESALINATION PLANT *March 2017*

Extracting Minerals From Water

- Enviro Water Minerals Company (EWM) has created a revolutionary desalination solution that extracts the dissolved solids contained in a variety of salty water sources for beneficial use:
 - Waste brine contains marketable minerals, which EWM extracts to sell
 - Full resource recovery (no residual waste water)
- Coupling of revenue from mineral sales and sale of potable water makes business model feasible
- Intellectual Property – Patent portfolio of 12 process patents



Example Sources

Brackish Water



Seawater



Produced Water



Full Recovery Desalination



- ✓ All contaminants separated into mineral products (zero discharge)
- ✓ Water yield = ~99%
- ✓ Is often cheapest new water supply option available

Example Production

Potable Water



Agricultural Gypsum



Caustic Solution



Milk of Magnesia



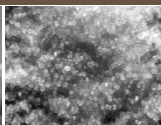
Potash Liquid Fertilizer



Bromide Rich Brine



High-Purity Salt



FIRST SITE: EL PASO

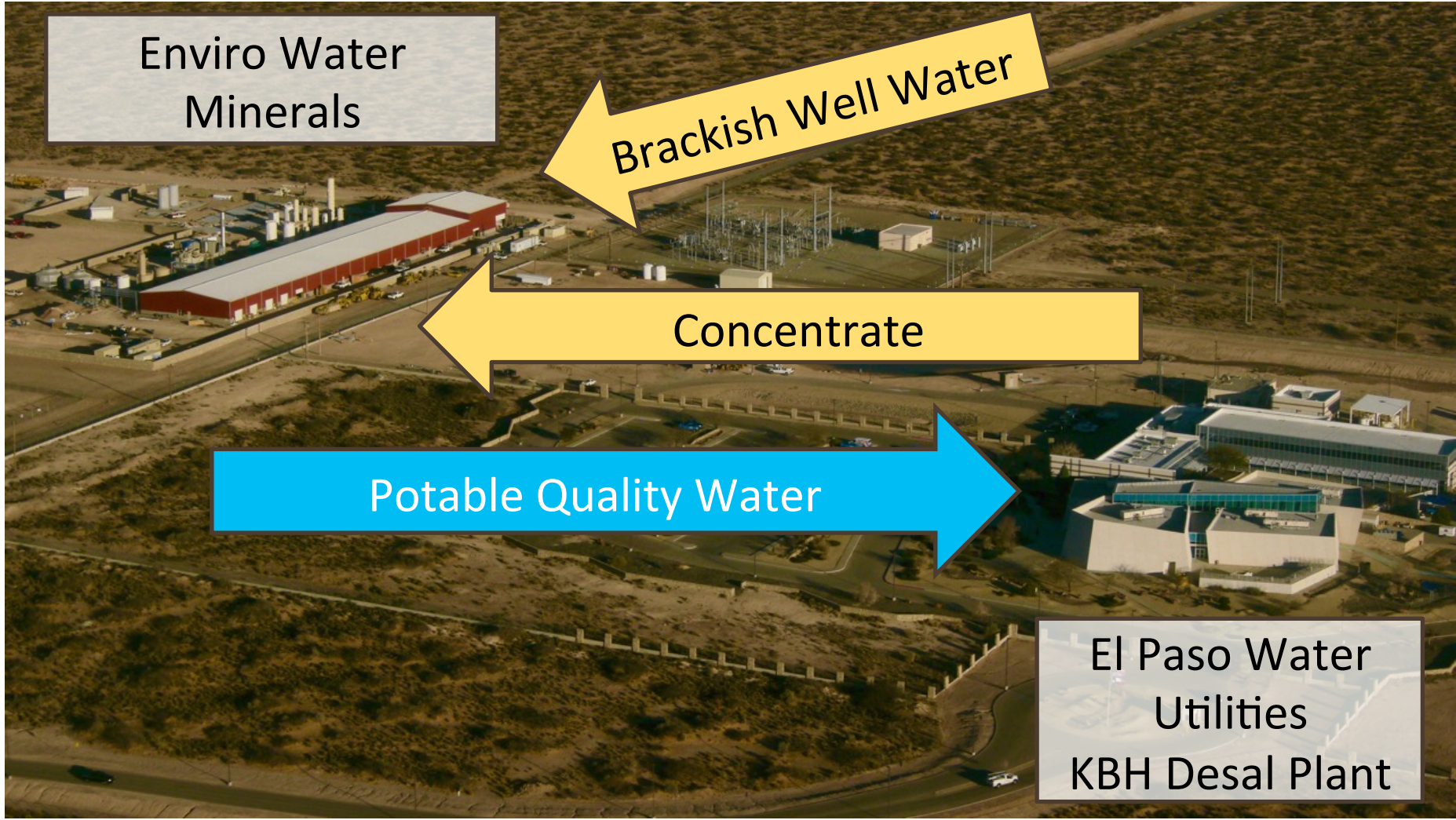
EWM's first project in El Paso will commence commercial operations in Spring 2017



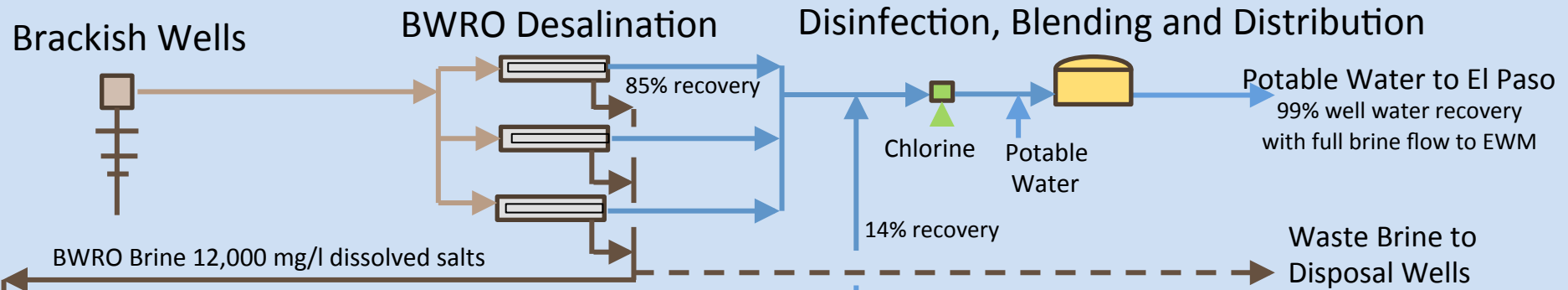
Benefits to El Paso include:

- Enhanced yield from existing desalinization plant (effectively 99%)
- Avoided concentrate disposal issues
- Preservation of brackish water aquifer life

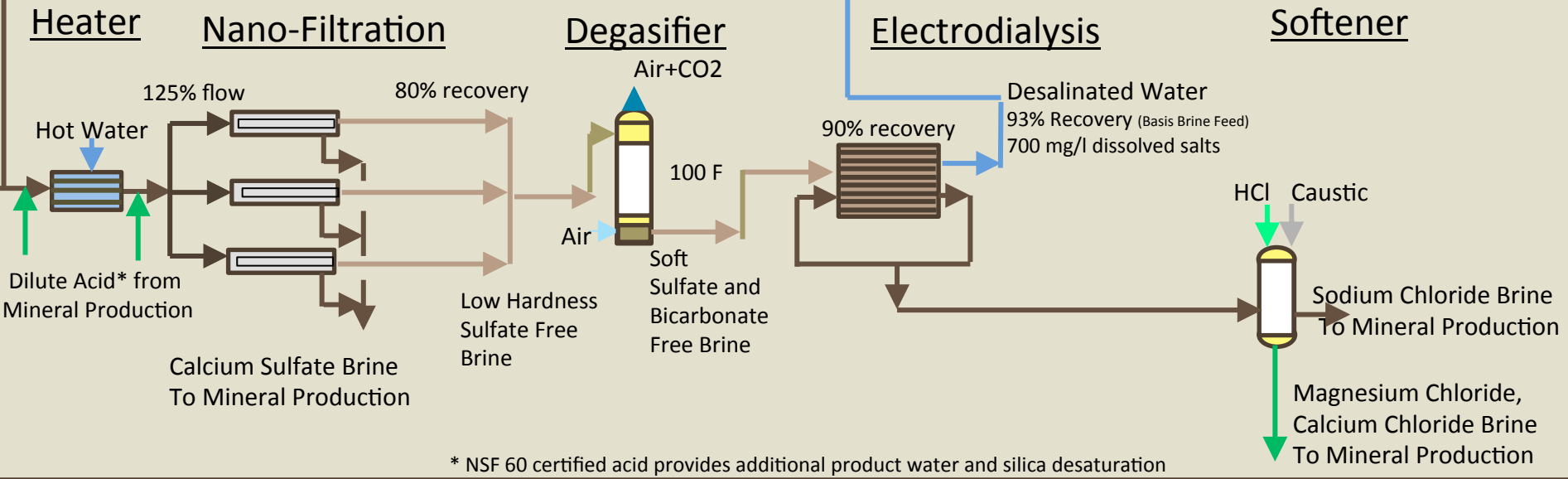




EXISTING EPWU KAY BAILEY HUTCHISON DESALINATION PLANT



ENVIRO WATER MINERALS EL PASO PLANT



- Produce ~2.1 mgd potable-quality water from 1 mgd of raw brackish water + 1.25 mgd concentrate
 - Influent raw brackish water TDS: 2,500 mg/L
 - Influent concentrate TDS: 13,000 mg/L
- Products:
 - Potable-Quality Water (TDS<700 mg/L)
 - Caustic Soda (50% Concentration)
 - Hydrochloric Acid (35% Concentration)
 - Gypsum (high purity, 100% Soluble)
 - Magnesium Hydroxide (98% Purity, 56% Solid)

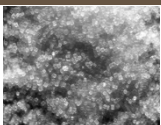
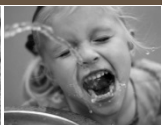
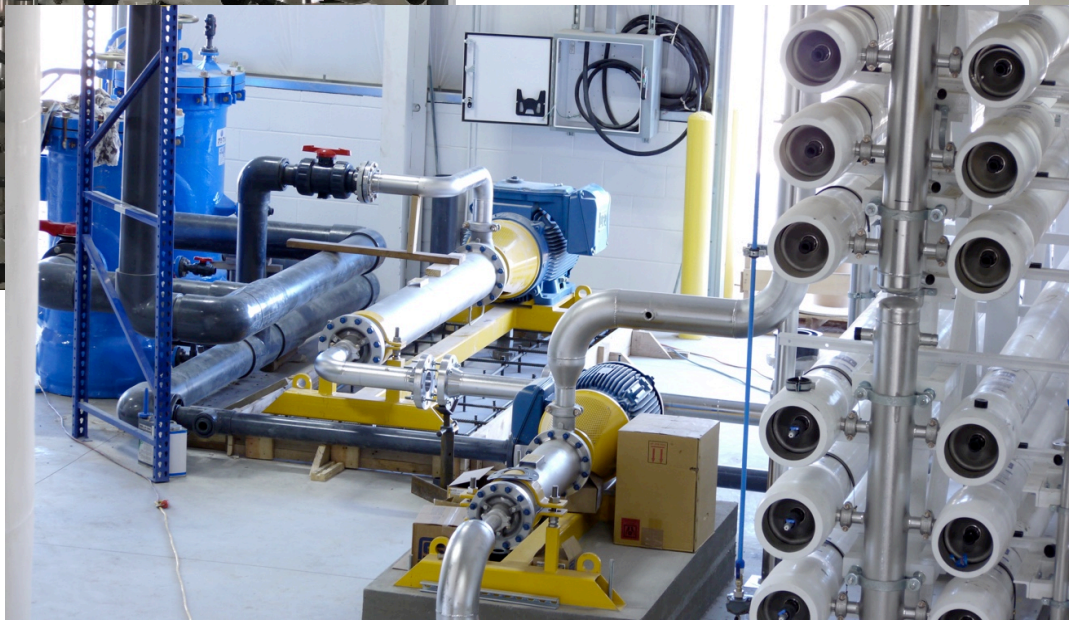
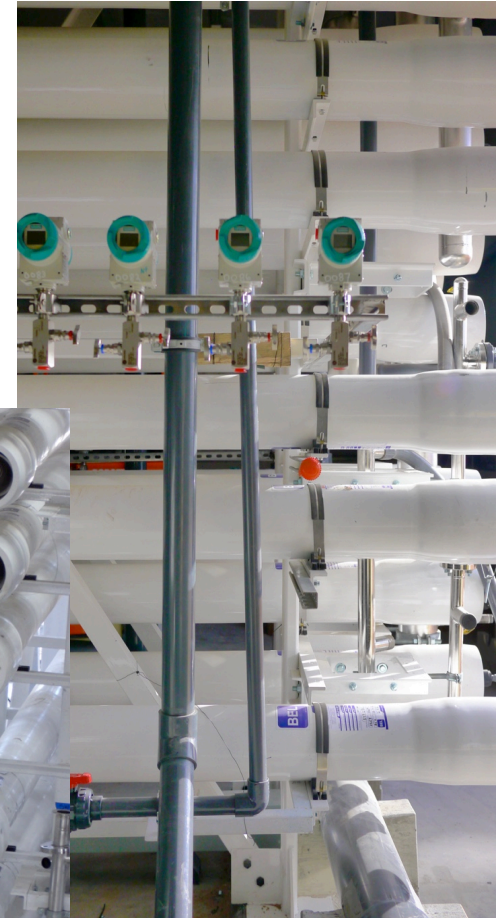


CONSTRUCTION UPDATE

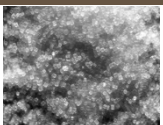
- Broke Ground January 2016
- Commence commercial operations: Spring 2017



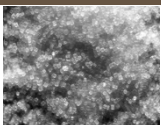
SITE PICS: NANO FILTRATION / RO



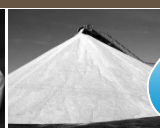
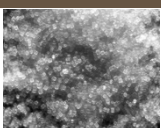
SITE PICS: SETTLING



SITE PICS: ELECTRODIALYSIS



SITE PICS: ION EXCHANGE



6.5 MW Natural Gas CHP



Degassifier



Cooling Towers



Evaporator



EWM's Full Recovery Desalination makes beneficial use of contaminants, eliminating costly and environmentally hazardous disposal issue

- All contaminants are separated into mineral products (zero liquid discharge)
- Water yield = ~99%
- Preserves finite aquifer resources
- Avoids disposal issues
- Often is cheapest new water supply option available
- Low CO2 footprint
- 12 Patents / patents pending



**2017
Innovative
Water Supply
Award**

*Winner of the Texas
Water Development
Board's 2017 Innovative
Water Supply Award for
the Technology Category*

