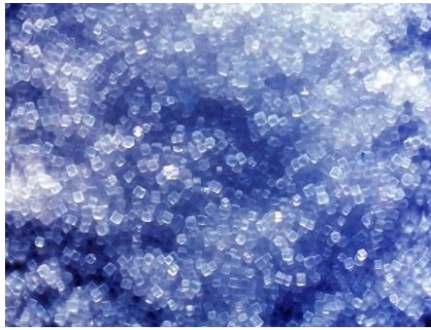
EWM

ENVIRO WATER MINERALS COMPANY





Texas Desal 2014

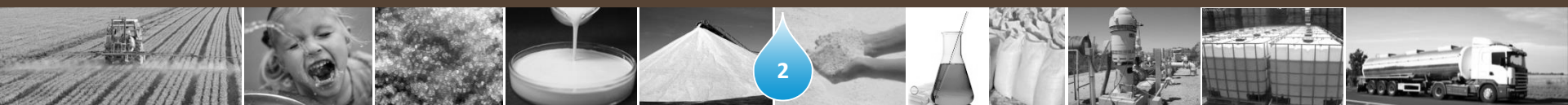
September 12, 2014

Extracting Minerals From Waste Water

INTRODUCTION TO EWM

Enviro Water Minerals Company, Inc, ("EWM") is commercializing its patent portfolio of cutting-edge technology that profitably recovers minerals discharged as waste brine from brackish water desalination plants

- Water scarcity affects every continent and affects 4 out of every 10 people (World Health Organization)
- Brackish water presents a vast supply of new freshwater resources
  - Over 300 brackish water reverse osmosis ("BWRO") plants across the United States
  - 10 new ones being built per year
  - Sufficient brackish water supplies in Texas to support 1,500 large BWRO plants (10 MGD) for 90 years
- Waste brine disposal is costly and has large environmental risks
  - In certain situations, brackish water desalination plants are being blocked from construction because they can't get brine disposal permits
- EWM's technology solves key impediment to large source of new freshwater supply: waste brine disposal
  - Waste brine contains valuable minerals, which EWM extracts to sell
  - No residual waste: only mineral products and additional potable water produced



EWM Team

Hubble Hausman

Chief Executive Officer

- Investment professional

Paul Wallace

Chief Technology Officer

- Texaco, GE, URS technical experience

Craig Pedersen

Senior Vice President

- Former Executive Administrator of TWDB

Additional EWM Resources

Business Advisors

- Lane Brostrom, CEO Cytometix
- Tim Pickett, CEO American Biofilter

Business Partners

NORRISLEAL ENGINEERING WATER

URS

MICKLEY & ASSOCIATES
Consulting Chemical & Processing Engineers

SCHLANGER SILVER BARG & PAINE, LLP
ATTORNEYS AND COUNSELORS

FLETCHER YODER

Texas Desalination Water Supply

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Sufficient brackish water exists to support 1,500 large BWRO plants for 90 years

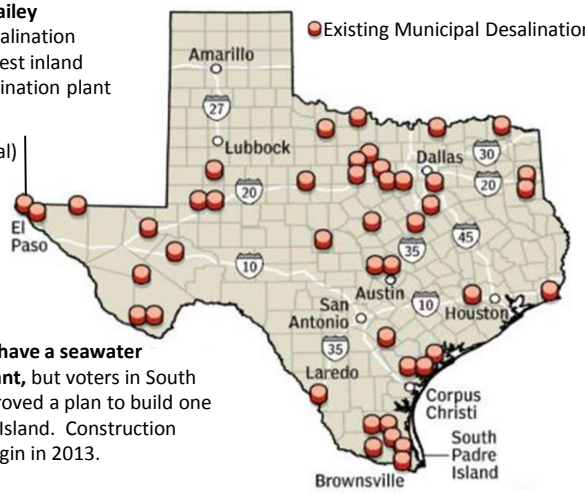
Texas Desalination Growth

- Inland brackish water
  - Best new water supply alternative for many areas
  - Utilizes untapped underground brackish water resources
- Seawater desalination
  - Higher salt content leads to higher desalination cost
  - Lower feed water supply cost and lower brine disposal cost

Desalination in Texas

El Paso's Kay Bailey Hutchinson desalination plant is the largest inland municipal desalination plant in the world.

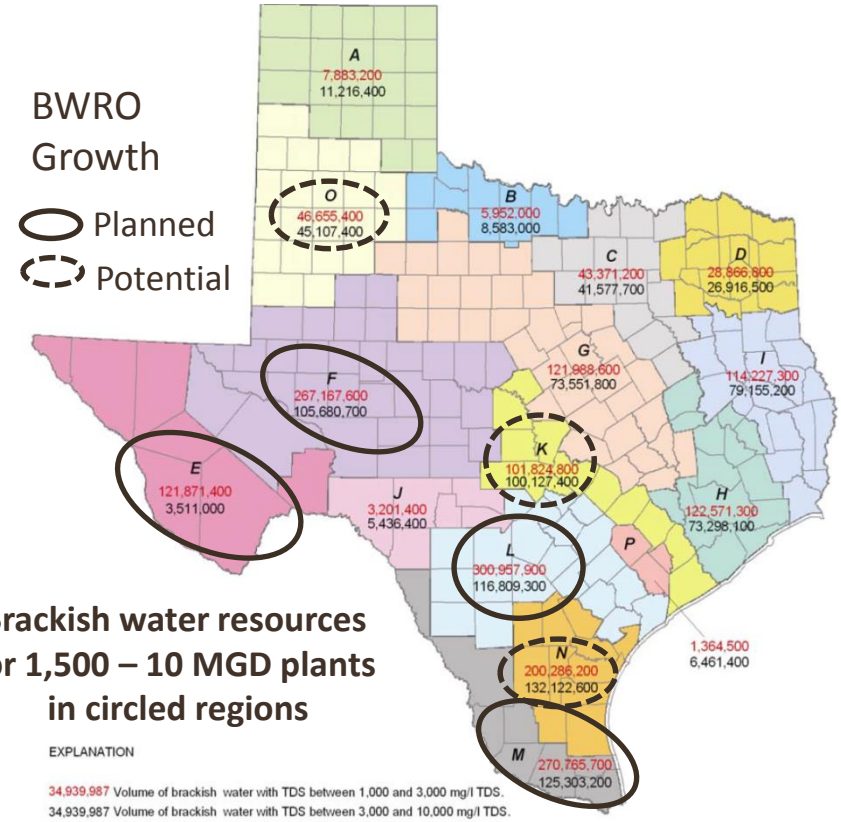
(27.5 MGD Desal)



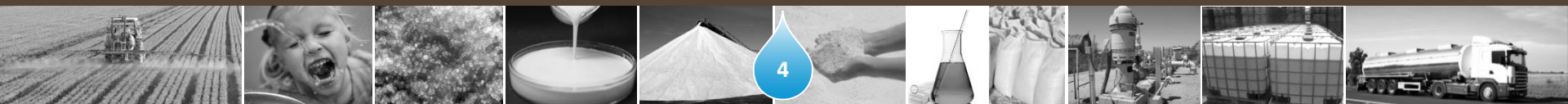
Texas does not have a seawater desalination plant, but voters in South Texas have approved a plan to build one on South Padre Island. Construction scheduled to begin in 2013.

Available Texas Brackish Groundwater

All volumes in acre-feet 1,000,000 ac-ft = 10 MGD for 90 years



Note: As of the end of 2011, Texas had 44 public water desalination plants in operation. The table on slide 3 shows 37 plant in Texas, which is sourced from an older report.
Source: Houston Chronicle Nov 2011; El Paso Water Utilities 2012; Sandia National Laboratories 2005; U.S. Geological Survey. TWDB 2005.



Waste Brine Disposal is Key Environmental Concern

Current brine disposal methods limit application of brackish water desalination in U.S. due to environmental concerns (lack of permitting)

- Potential long-term environmental impact
  - Surface water salinity increase
  - Water treatment plant overload
  - Contamination of groundwater (subsurface injection)

Disposal Methods

- Deep well injection
  - Current standard in brine disposal for new large scale BWRO plants
- Evaporation ponds
  - Large quantities of accumulated waste salt and large land area required make this unsuitable for large scale BWRO plants
- Discharge to sewers and rivers
  - Contaminates these already marginal quality water sources and prevents them from being used by downstream communities
- Zero liquid discharge
  - High cost (typically doubling the capital cost and power consumption of the BWRO plant). Typically only used by industrial users on a small scale (< 0.25 MGD)

Waste Brine Injection

- Municipal BWRO brine shallow injection
  - Single cap rock formation
  - Limited separation from drinking water aquifer
- Injection zone must have permeability
  - Sufficient pore space for new brine
- Risk of overpressure
  - Excess injection
  - Weak or leaky cap rock
- Need large underground brine formation for 50 year BWRO plant life

EWM Solution to Brine Management

BWRO Brine Beneficial Use Challenges

× Scaling with further brine concentration

× Not economical to produce low purity mixed salts

× High energy and capital cost for thermal evaporators

EWM Solution

✓ Extract multiple, high purity non-scaling brines

✓ Combine high efficiency membrane and ion exchange technologies

✓ Integrate heat and power generation with desalination

✓ Produce multiple high value chemical and mineral products

Evaporator Fouling with Gypsum Scale

Low Value Mixed Salt for Road De-icing

EWM Completely Eliminates Waste Brine Disposal Issues

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EWM separates waste brine into valuable commodities, allowing access to vast sources of additional freshwater supplies

- All contaminants are separated into valuable mineral products
- Produces additional potable water
- EWM can add or remove equipment to treat a variety of brackish water sources
- Low CO2 footprint
- Cost-competitive with current disposal methods

Illustration of EWM's Solution

Water Well

- Pumps brackish water from sub-surface aquifers

Brackish Water

Local Water Utility (BWRO Plant)

- Separates brackish water into potable water and waste brine

Waste Brine

Potable Water

Potable Water

- Available for community consumption

Potable Water

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Separates waste brine into valuable commodities and potable water, eliminating all waste

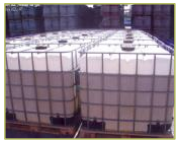
High Purity Salt *(bleach, chemicals)*

Agricultural Gypsum *(metals free)*

Caustic Solution *(chemicals, alumina)*

Potash Liquid Fertilizer

Bromide Rich Brine *(power plant mercury scrubbing)*



Milk of Magnesia *(water treatment)*

EWM El Paso Water Purification Plant

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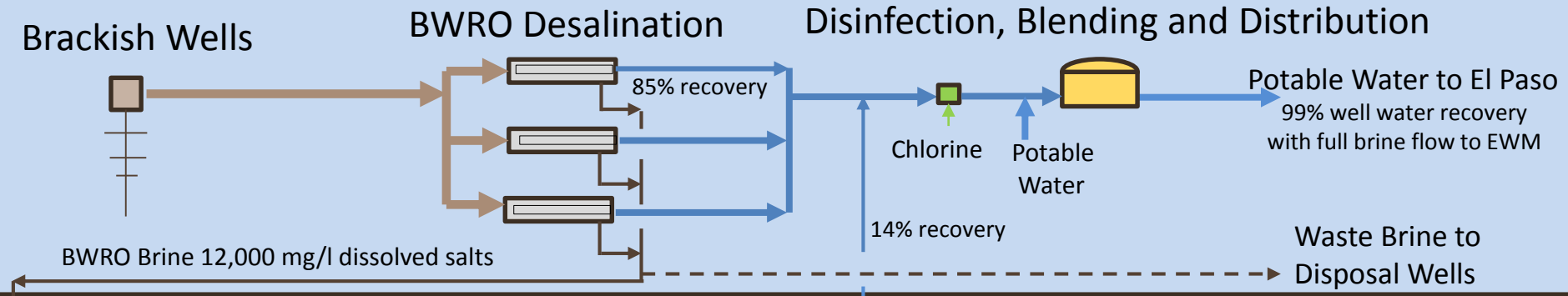
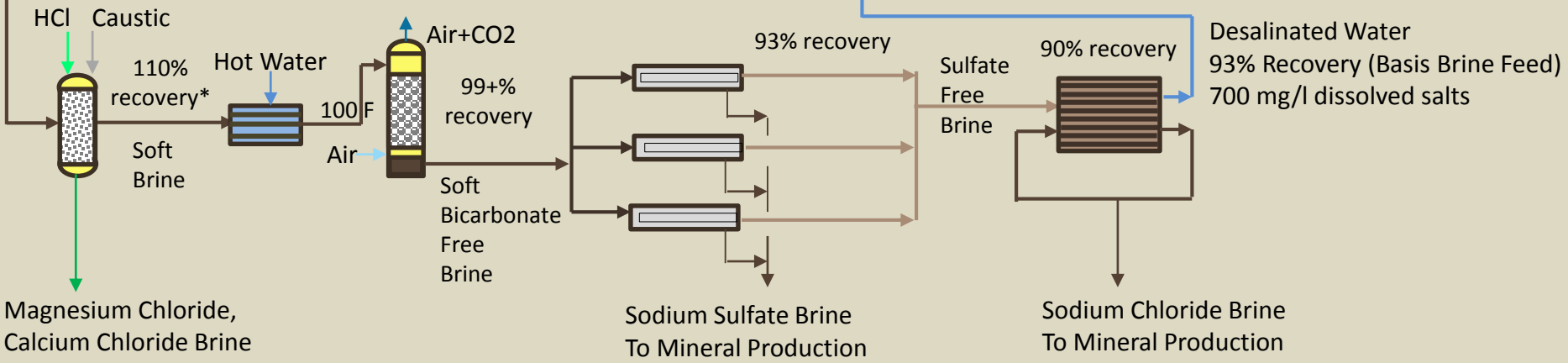
Existing EPWU Kay Bailey Hutchison Plant



Proposed Enviro Water Minerals El Paso Plant



* NSF 60 certified caustic provides additional product water after sodium absorption

Proposed EWM El Paso Plant Sketch

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Pilot Testing Results

Onsite Testing

- ✓ Successfully completed El Paso pilot and report –**MAY 2014**
- ✓ Successfully completed SAWS pilot testing and report- **JUL 2014**
- ✓ Received TCEQ El Paso pilot approval - **AUG 2014**
- ✓ TCEQ SAWS pilot approval **- pending**

Offsite Testing

- ✓ Successfully completed offsite gypsum and magnesium hydroxide pilot testing – **MAY 2014**
- ✓ Successfully completed offsite hydrochloric acid and caustic bench testing –**MAY 2014**