

VAPOR COMPRESSION DISTILLATION

Integrated On-Farm Drainage Management (IFDM)

Perforated drain lines are installed under drainage-impaired cropland.
 Saline water drained from cropland is diluted and used to irrigate a salt tolerant crop.
 Drain water from the salt tolerant crop is diluted and used to irrigate salt tolerant forage.
 Drain water from the salt tolerant forage is diluted and used to irrigate salt-loving halophytes.
 Drain water from the halophytes goes to a solar evaporator where the water evaporates and the salt remains to be harvested.
 He converts 90.6% of his previously unproductive land to high value crop land.
 Sixty acres or 9.4% of his land is dedicated to salt management.
 The farmer gains \$720,000 in land value by implementing IFDM on 640 acres of water-logged land that formerly would not grow salt tolerant crops like cotton.

Forever Water added to project.

Ninety-nine and a half percent of the unproductive land is converted to premium cropland.
 Only three acres or 0.5% of the land is dedicated to salt management.
 The farmer gains \$228,000 in land value by using the Forever Water process on 640 acres of drainage-impacted land.

Illustration

Value of Land

Year 1: 640 acres of drainage-impaired cropland. Install perforated line under 580 acres and set up drainage for small small fields on 60 acres.

640 acres at \$2,500 per acre: \$1,600,000

Year 3-5: 580 acres can grow garlic, tomatoes, onions, lettuce. 60 acres grow salt tolerant crops and forage and produce marketable salt products like a road dust suppression solution. The revenues from the 60 acres offset its costs.

580 acres at \$4,000 per acre: \$2,320,000

60 acres remain at \$2,500 per acre; no impact on the total value of the 640 acres.

Value added by IFDM

\$ 720,000

Year 3-5: 637 acres can grow garlic, tomatoes, onions, lettuce. Three acres grow salt tolerant crops and produce salt products.

637 acres at \$4,000 per acre: \$2,548,000

Revenues of the 3 acres salt offset its costs.

3 acres remain at \$2,500 per acre; no impact on the total

Value added by Forever

\$ 228,000

Combined value added by IFDM and Forever Water

\$948,000