Attachment A to Item 9e 3/13/15 FORA Board Meeting

MCWD Augmentation Project

FORA Board of Directors, March 13 2015

What? (is MCWD proposing)

To construct a modular desalination plant that can be scaled up

Why now? (is MCWD proceeding)

- As learned in Santa Cruz and in Monterey, planning for desalination projects can take years
- The City of Marina has little water left from its allocations for development at the Airport Business Park and for full development of Cypress Knolls
- The City of Seaside needs water now for development within its city limits
- While we do not know for certain when water allocations for projects on Ord will be expended, future planning says it will happen
- It is not too early to begin that augmentation process

What? (is the general design concept)

- The intake would be vertical wells close to the beach
- The brackish water would be pumped to a desalination plant located on higher elevations on Armstrong Ranch
- The brine concentrate would be blended with a fresh water source for disposal using the MRWPCA outfall
- The project design would allow for a modular plant to meet MCWD commitments to FORA
- In consideration of GHG concerns, plan may include solar panels located on upper elevations of Armstrong Ranch

Why? (is MCWD proposing this)

- In the Water/Wastewater Facilities Agreement and successor amendments, MCWD agreed:
 - To own, operate, and maintain the existing water (and wastewater collection) systems on the former Fort Ord;
 - To plan, design and construct additional water and sewer facilities as FORA and MCWD reasonably determines are necessary for the service area, subsequently agreed to as an additional 2,400 acre feet of water.
 - MCWD is currently negotiating with MRWPCA as part of the Pure Water Monterey Project to use existing pipes on General Jim Moore Blvd owned by MCWD and the lease of reclaimed water to which MCWD has senior rights

Why MCWD?

- MCWD has a contractual agreement with FORA for water and sewer service including augmenting water supply when needed, and;
- MCWD has good experience in desalination planning:
 - In 1995, MCWD was one of the first agencies to build and operate a desalination plant in the United States
 - In 2003, MCWD completed a programmatic EIR on a 3,000 acre ft desalination project on Marina State Beach
 - In 2007, MCWD completed a programmatic EIR on a 1,500 acre ft RUWAP desalination project on Fort Ord Dunes State Beach
 - Interrupting its own desalination planning, MCWD joined with the Regional Project for 10,500 acre ft in 2011 on Cemex lands and certified a project level EIR

How? (do you proceed)

- District staff is currently working with the District's contract engineer and Denise Duffy and Associates to review all past desalination work done by the District
- We will then use all that work to piece together a project description that uses the best features of those plans to describe a conceptual desalination project design
- That conceptual project design will then be used to advertise for engineering proposals to build on that conceptual design to complete 10% engineering on a full desalination project

What? (does 10% design give you)

- It gives design solutions to any aspects of project components that may be problematic (such a beach wells or brine concentrate disposal)
- It gives an engineer's estimate of total project construction cost
- It gives enough design information to begin the CEQA/NEPA process
- It gives enough design information to begin the permitting process
- It gives enough information to begin looking for grants and loans

What? (is this going to cost?)

- The process of conceptual design is underway with MCWD staff and environmental consultant
- That effort will cost no more than \$25k in MCWD staff costs
- With that conceptual design, we will solicit 2 proposals:
 - Engineering design for a full project completed to a 10% design level. Estimated cost for this 10% design is expected to cost between \$250 AND \$500K;
 - Environmental consulting to advise the design team on environmental and permitting issues. Estimated cost is expected to be less than \$100k

Before we go to work...

Comments?

Questions?

Reactions?

Support?