DISCUSSION ITEM
July 2, 2018

TO: Planning & Operations Committee
(Directors Osborne, Tamaribuchi, Yoo Schneider)

FROM: Robert Hunter, General Manager
Staff Contact: Karl Seckel

SUBJECT: Status of the Orange County Water Reliability Study 2018 Update

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file the report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

Staff and CDM Smith are continuing work on the Orange County Water Reliability Study 2018 Update. MWDOC staff has most recently been working with MET staff to obtain the updated modeling of SWP supplies with the WaterFix in place assuming MET only participates in the yield from one of the tunnels (this assumes that the yield from the second tunnel goes to other entities). This information was recently provided to MWDOC and its consultant to allow the GAP reliability analyses to be completed (GAP meaning GAP in supplies assuming no new investments other than the WaterFix).

In addition, staff also worked with MET staff to obtain information on MET’s updated rate forecasts assuming MET financially participates in funding the first and second tunnels. One of the sensitivity analyses to be considered is the repayment by other water agencies of MET’s participation in the 2nd tunnel. MWDOC recently received this information from MET out to the year 2028 and then had to derive future rates out to 2050. This work has been completed and provided to our consultant.

<table>
<thead>
<tr>
<th>Budgeted (Y/N):</th>
<th>Budgeted amount:</th>
<th>Core</th>
<th>Choice ___</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action item amount:</td>
<td>Line item:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiscal Impact (explain if unbudgeted):</td>
<td></td>
<td></td>
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</table>
MWDOC staff and our consultant worked out the Final Planning Scenarios to be tested as outlined on the following page. In addition to the supplies provided in the table, the following additional local supplies will be evaluated:

- Carson IPR
- Poseidon Huntington Beach
- Doheny Ocean Desalination
- San Juan Watershed Project
- Cadiz Water Bank
- Strand Ranch Water Bank
- SOC Interconnection Project expansion (pending completion of study with IRWD)
- Emergency Pump-in to the EOCF#2

Cost information on the above projects is coming in slowly. MWDOC will be using the most recently published information for the Poseidon Project at the Plant fence line as outlined in the June OCWD Board meeting and will provide an estimated cost of the integration costs for the project.

Our current schedule anticipates the following schedule for completing the OC Water Reliability Study:

- July – Host a workshop with our consultant, member agencies, and the Three Cities; receive initial reactions, input and responses from the agencies
- August – Brief MWDOC’s P&O Committee on the various analyses including the initial responses from our agencies. Finish any remaining updates or analyses.
- September – Complete the study documentation and planned presentation to WACO
## Final OC Study 2018 Update Planning Scenarios

<table>
<thead>
<tr>
<th>Planning Scenario</th>
<th>Climate Impact</th>
<th>SAR Baseflows to OC Basin</th>
<th>BOR Colorado River Allocations to Lower Basin States</th>
<th>MET WaterFix 2nd Tunnel Cost Recovery</th>
<th>MET WaterFix Average Supply(^1) (AFY)</th>
<th>New MET CRA Transfers(^2) (AFY)</th>
<th>New MET SWP Transfers(^3) (AFY)</th>
<th>New MET Region Local Supply (AFY)</th>
<th>Total New MET Region Supply (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Good Conditions</td>
<td>Slight(^4)</td>
<td>Med</td>
<td>Draft DCP(^6)</td>
<td>No</td>
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<td>100,000</td>
<td>0</td>
<td>88,000</td>
<td>628,000</td>
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<td>2. Stressed Conditions</td>
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<td>Med</td>
<td>Draft DCP(^6)</td>
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<td>180,000</td>
<td>150,000</td>
<td>162,000</td>
<td>932,000</td>
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</tbody>
</table>

Notes:
1. Estimated average from model runs with 1-tunnel solution (MET gets approximately 32% of 6,000 cfs project).
2. Baseloaded supply.
3. Dry year supply.
4. Some climate change impacts on SWP, imbedded in DWR's CALSIM runs.
5. Moderate impact to SWP supplies and significant impact to Colorado River supplies (CSIRO GCM)
6. California and MET take shortages as early as Lake Mead elevation level of 1,045 feet.
7. Remaining shortages under both Planning Scenarios will be tested for sensitivity by adding either/or MET Regional Recycled Water Program (Carson) and New MET surface reservoir (400,000 AFY capacity)