

Uses of 2015 UWMP Wastewater and Recycled Water Data

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What Happens to the Data?



Let's Recap a Few Things

- Last year December's section meeting presentation
- Next Monday's UWMP Guidebook workshop at EBMUD
- Upcoming 2015 Recycled Water Survey
- 2016 drought planning



Where is El Nino?



Godzilla



Mothra



Where is El Nino?



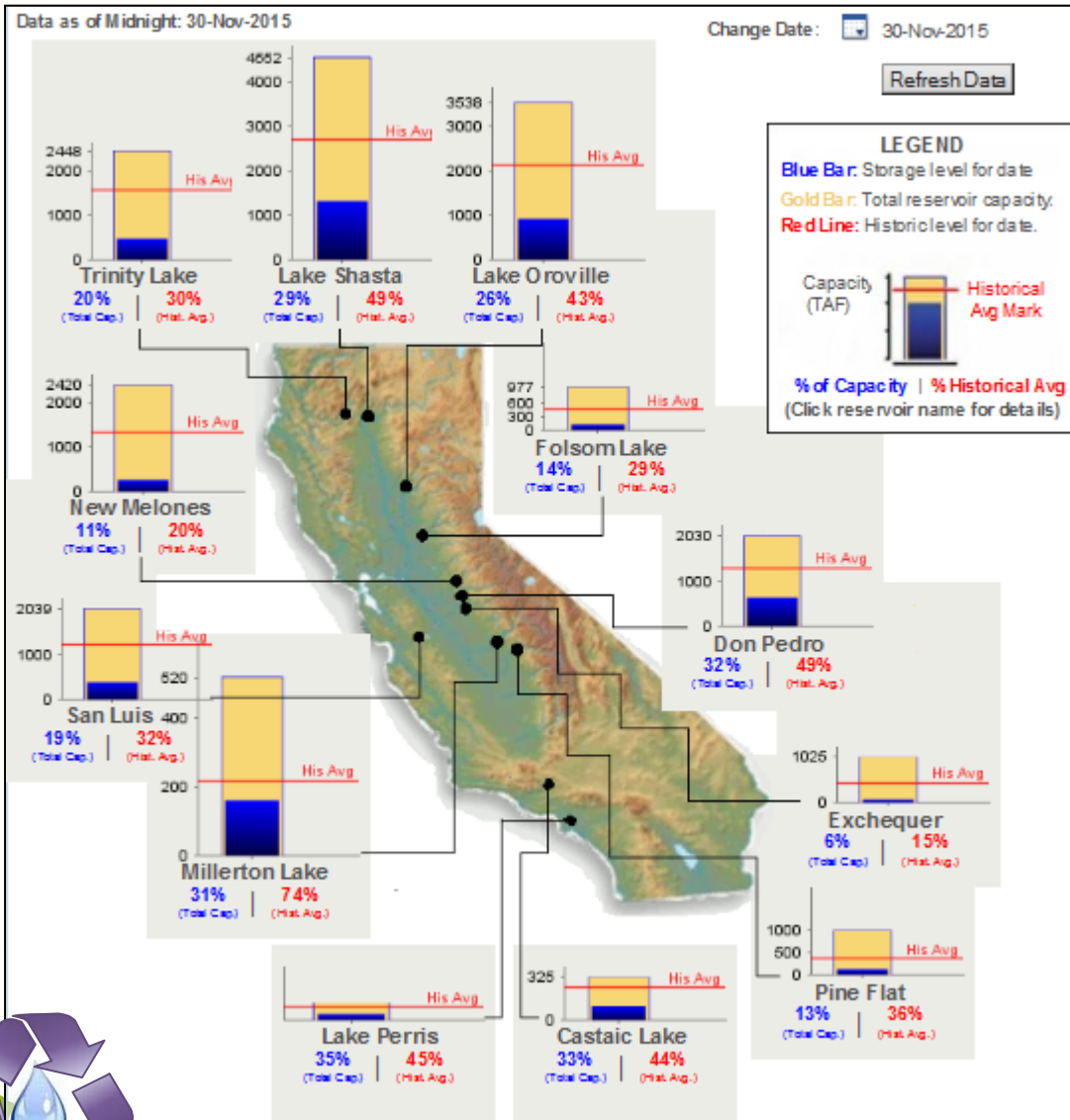
EBMUD staff as El Nino



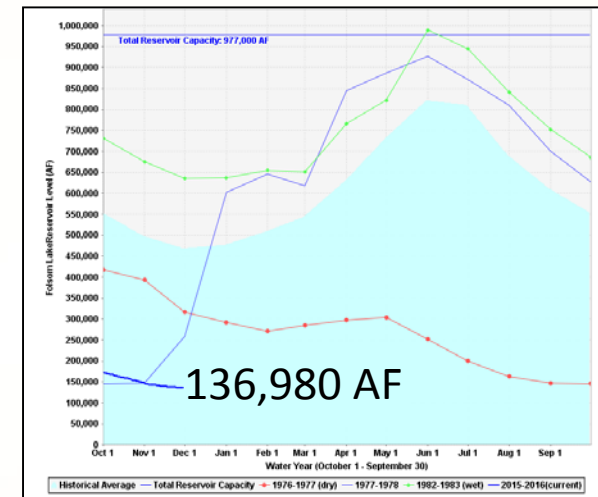
DWR staff as The Drought



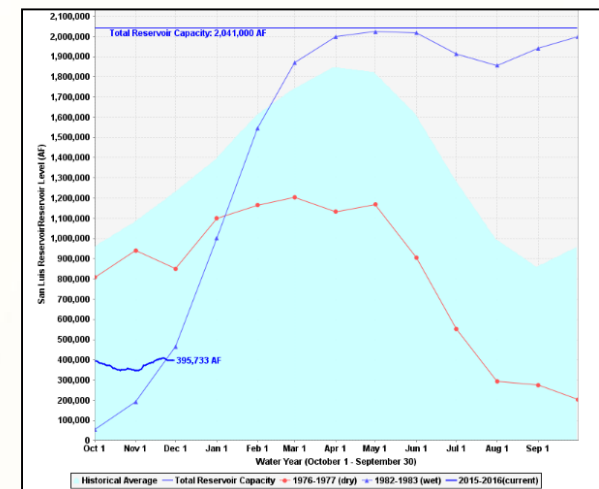
Meanwhile



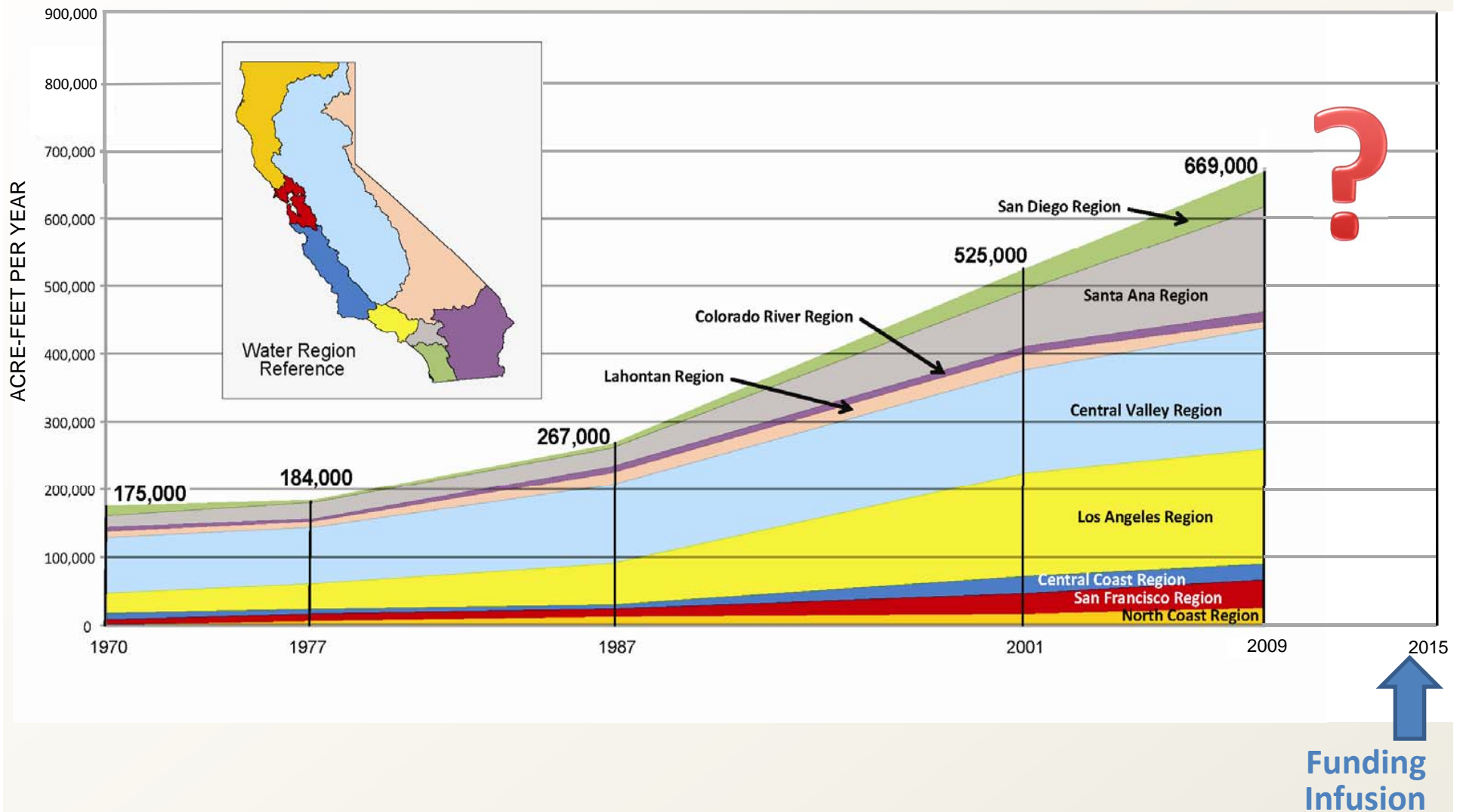
Folsom Reservoir



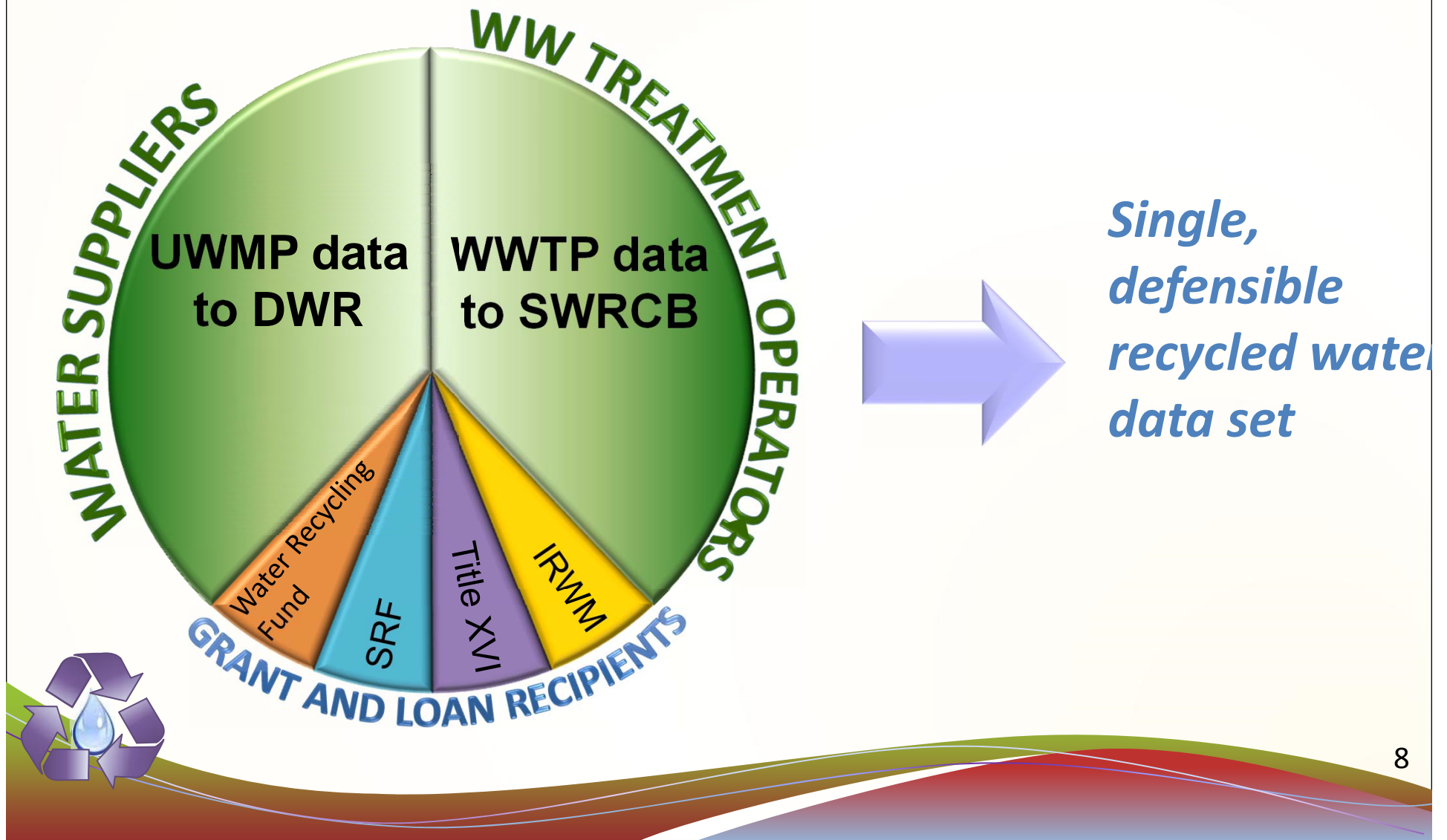
San Luis Reservoir



Inquiring Minds Want to Know How Much Recycled Water Use is Increasing



Integrate Data From Multiple Sources



What Happened to the 2010 UWMP Wastewater Data?

- Because of inconsistencies and duplications in how the data were reported, it was not usable and was not released.
- Changes to the 2015 are implemented – in spite of no code changes – to support improved reporting



DWR is Asking for More WW and RW Info in the 2015 UWMPs

- Improve the UWMP wastewater and recycled water data quality
- Integration of UWMP with 2015 Recycled Water Survey
- Increased focus on recycled water use and its usability as a water resource
- Infusion of money supporting recycled water projects in 2014 and 2015



UWMP Tables Were Modified to

- Improve the reliability of the reported data
- Differentiate between wholesale and retail recycled water
- Provide additional descriptive information for clarification and subsequent data use.



Appendix M Provides Clarification

DRAFT 2015 UWMP Appendices DRAFT

Disposal Versus Recycling

There are three situations where there may be misconceptions about the distinction between wastewater disposal and recycled water:

- Release of treated municipal wastewater into a receiving water body
- Land application of treated municipal wastewater onto a field for the primary purpose of disposal
- Treated wastewater percolation ponds

Once the treatment process is complete and the effluent is released into a receiving water body, the effluent becomes part of the receiving water body and is considered disposal unless there is a contractual arrangement to use the river to convey the treated water from the discharger to a downstream user. If a downstream user extracts water from the water body without a contractual relationship with the upstream discharger, the reuse of the treated effluent would be considered an incidental use (see below for further discussion of incidental use).

If a wastewater treatment plant uses land application to dispose of its treated effluent, how the irrigated field is subsequently used distinguishes whether the disposal can also be considered as water recycling. If the field has a planned use for pastureland or crop cultivation, then the effluent would be classified as recycling for agricultural irrigation. If there is no use of the field, then the effluent discharge is considered disposal without recycling.

Percolation disposal ponds may be adding water to a usable aquifer, but that incidental recharge is not a planned purpose of such ponds and these ponds are not regulated as a water supply source. Thus, percolation from disposal ponds is not counted as groundwater recharge or recycled water use.

Direct Versus Indirect Use

Direct beneficial use is defined in the Code of California Regulations § 60301.200 as the use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to waters of the State. Direct reuse involves a conveyance structure, such as a pipe or canal, to take treated wastewater from the point of treatment to the point of use. Typically, treated wastewater is discharged into rivers and streams as part of permitted disposal practices. Discharged water then commingles with the stream or river that may be a water source for downstream communities or agricultural users. These downstream uses are considered indirect reuse. Groundwater recharge and surface water augmentation with recycled water are two forms of planned indirect reuse for potable use, which are discussed further below.

Planned Versus Unplanned Beneficial Uses

Treated municipal wastewater is integrated into California's water supply through both planned and unplanned applications. A planned reuse is an intentional use of recycled water without

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DRAFT 2015 UWMP Appendices DRAFT

are: commercial building use (toilets, HVAC, etc.), car washes, laundries, and retail nurseries. Landscape irrigation of commercial building areas is to be classified as landscape irrigation if it is separately metered or if landscape is the dominant use of mixed uses served by a single meter. Fill stations, if they are primarily used for commercial use, should be classified as commercial use. Landscape irrigation on golf courses should be reported as golf course irrigation. Fill stations primarily used for public use should be classified as landscape irrigation.

Industrial Use

Uses by industrial water users, except landscape irrigation and geothermal energy production. An industrial user is a water user that is primarily a manufacturer or processor of materials. Examples of industrial water uses are cooling towers, oil refining, process water, and mining. Landscape irrigation of industrial building areas is to be classified as landscape irrigation if it is separately metered or if landscape is the dominant use of mixed uses served by a single meter.

Geothermal and Other Energy Production

Water used to augment geothermal zones or used in the energy industry, excluding refineries. Refinery use is classified as industrial.

Seawater Intrusion Barrier

Injected water in coastline setting designed to reduce seawater intrusion into a coastal aquifer with a seawater interface.

Recreational Impoundment

Addition of water to maintain water levels in a lake for recreation or other non-potable uses. Lakes for wildlife habitat are included in the natural systems/restoration category. Small impoundments that are features in parks or golf courses are included as part of landscape irrigation or golf course irrigation.

Natural Systems/Restoration

Any water provided to a designated wildlife area, whether included as part of a wastewater facilities treatment process or an independent area. The area must be designated as a wetland or wildlife area and so does NOT include water that a wastewater facility must discharge to maintain habitat in the creek to which it is discharging. This category also includes recycled water used at wetlands, wildlife habitats and refuges, and duck clubs.

Groundwater Recharge (IPR)

Addition of water to augment groundwater aquifers for future use. Only groundwater recharge projects that are permitted by the state or regional board for the purpose of groundwater recharge is accounted for in this category. A water agency cannot claim as planned groundwater recharge treated wastewater incidentally recharging groundwater as a result of leakage from evaporation/percolation ponds.

When recycled water is blended with other water sources within the recharge system, only the amount of recycled water is to be reported in Tables 6-4 and 6-5.

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Where does the UWMP data go?

**2015
UWMP
Recycled
Water Data**

2018
California
Water Plan

Data
Requests

2017 Report on
Recycled Water
Use in California

Prop 1 and Drought
Funding Benefit
Assessment

2015 Recycled
Water Survey



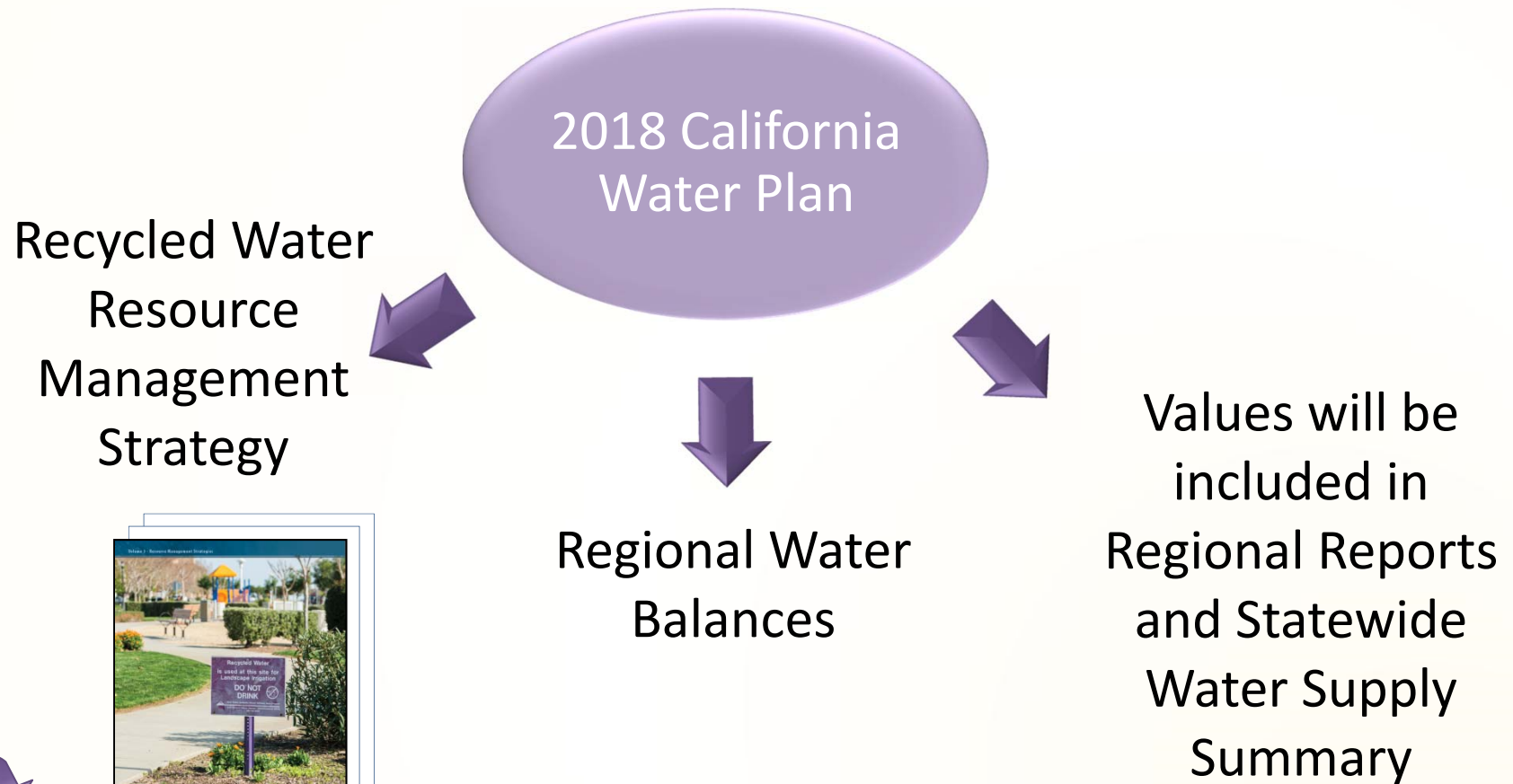
California Water Plan

- Next out in 2018
- DWR is currently assessing potential improvements to water balancing data inputs and coordination with SGMA implementation
- UWMP data can positively benefit this effort

| Table b-7 Detail: Wastewater Generated Within Service Area in 2015 | | | | | | |
|---|--|--|--|----------------------|---|---|
| Percentage of 2015 service area covered by wastewater collection system (optional) | | | | | | |
| Percentage of 2015 service area population covered by wastewater collection system (optional) | | | | | | |
| Name of Wastewater Collection Agency | Wastewater Volume Metered or Estimate? <small>Drop Down List</small> | Volume of Wastewater Collected in 2015 | Receiving Wastewater Treatment | | | |
| | | | Name of Wastewater Treatment Agency Receiving Collected Wastewater | Treatment Plant Name | Is WWTP Located Within UWMP Area? <small>Drop Down List</small> | Is WWTP Operation Contracted to a Third Party? (optional) <small>Drop Down List</small> |
| | | | | | | |
| | | | | | | |
| Total Wastewater Collected from Service Area in 2015: | | 0 | | | | |
| NOTES: | | | | | | |



Integrating UWMP Data Into CWP



Monday's UWMP Workshop

- Monday 9:30 to 2:30
- EBMUD Board Room
- Overview of the 2015 UWMP process and Guidebook

