San Diego Region Stormwater Capture and Use Feasibility Study (SWCFS)

Project Update on TAC #2

IRWM RAC

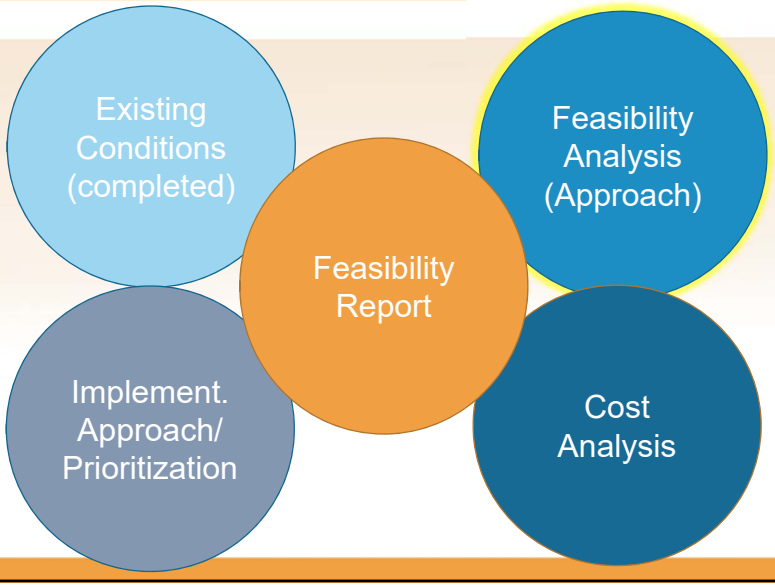
December 6, 2017

Presented by Stephanie Gaines and David Pohl, ESA

Regional SWCFS TAC Meeting #2

- Modeling Approach Presentation
  - Where are we in the project?
  - What are we asking from TAC?
  - Method Approach Overview
  - Clarification Questions

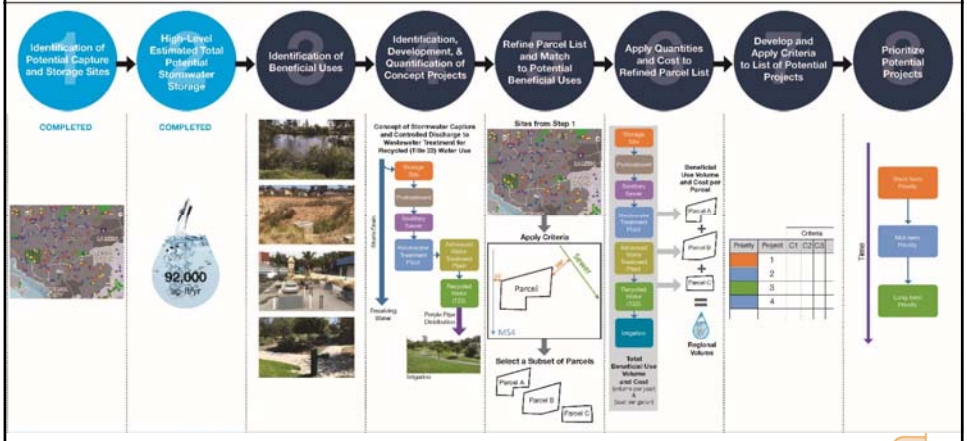
Feasibility Analysis



Modeling Approach
What are we asking from TAC?

- Small and Large Group Participation
- Review and comment on Draft Method Approach Technical Memo
- Memo posted on www.projectcleanwater.org
- Comments due **November 15**

8 Step Modeling Approach for Analysis



5

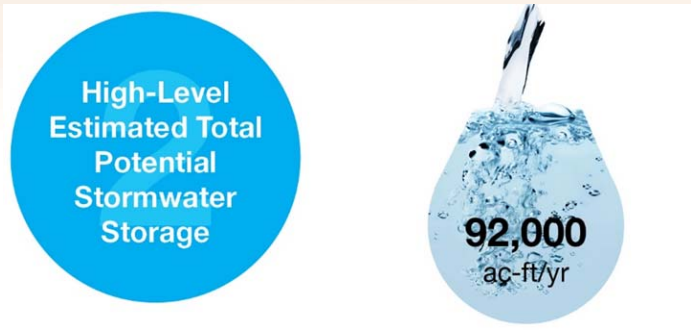
Modeling Approach – Step 1

- Completed in Regional Stormwater Resource Plan
- GIS Analysis of Public Parcels
- 1,200 Potential and Feasible public parcels

6

Modeling Approach – Step 2

- Completed in Regional Stormwater Resource Plan
- Based on Estimates of Storage at Feasible Public Parcels



Step 3: Identify Beneficial Uses

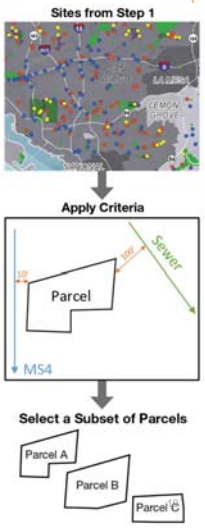
- Discharge to GW Aquifers, Potable Use
- Discharge to GW basins, Natural Hydrology, Biological Uses
- On-site Irrigation (Public Parcels)
- Small-scale On-site Irrigation (Private)
- Natural Treatment Systems / Restoration sites (Wetland Treatment)
- Controlled Discharge to Sanitary Sewer:
  - Solids Management, Low Flows
  - Indirect Potable Use
  - Recycled Water Use

Step 4: Identify/Quantify Concept Projects

- Example/Case Study Projects
  - Implemented, Planned or Conceptual Projects
- Representative of 8 Uses
- Quantification & Costs in acre-ft/year & $/gallon

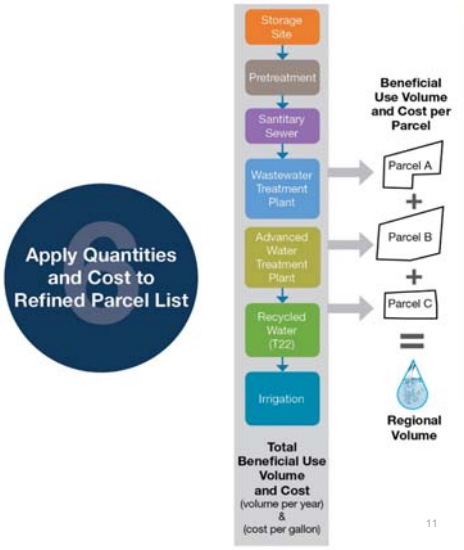
Step 5: Refine Parcel List, Match with Beneficial Uses

- Refinement of 1200 public parcels
- Criteria applied to each parcel beneficial use
- Example: Distance to Sanitary Sewer and Capacity of Line



Step 6: Apply Cost & Quantities

- Apply case study projects to the refined parcel lists
- Outcomes:
  - Regional Volumes and Unit Costs

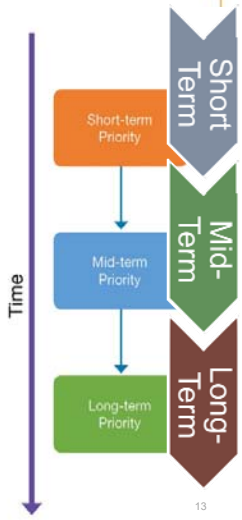


Step 7: Develop and Apply Criteria

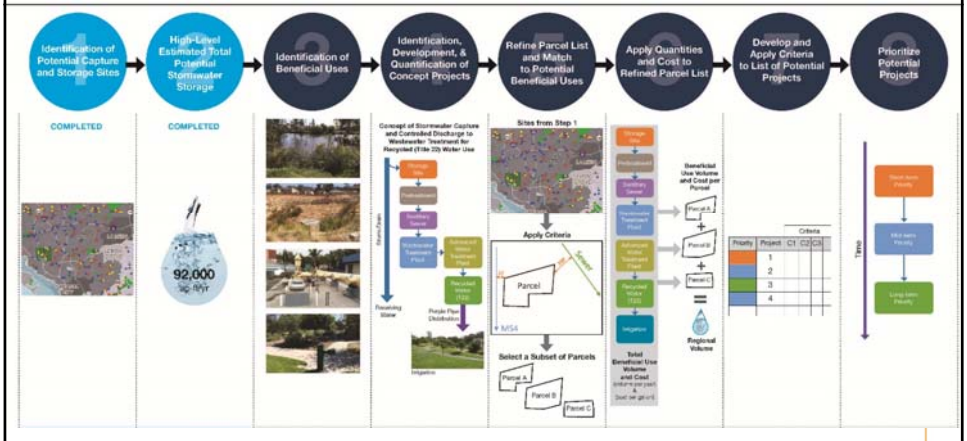
- Acre-ft./yr.
- $/gal
- Total Cost
- Cost sharing/grant funding potential
- Inter-Agency Agreements
- Feasibility of Implementation
- Multi-benefits achieved

Step 8: Prioritize Potential Projects

- Apply criteria to planned and concept projects
- Identify opportunities and constraints under each use
- Focused prioritization of parcels based on acre-ft./yr and $/gal



8-Step Modeling Approach for Analysis



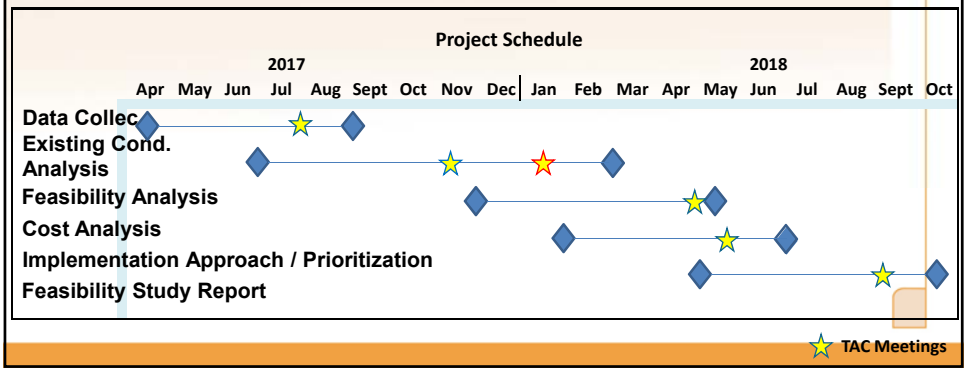
Next Steps: Results of Analysis

- Memo posted on www.projectcleanwater.org
- Comments due **November 15**
- Next TAC Meeting: Results of Feasibility Analysis
  - END-January 2018

15

Project Schedule – Next Steps

- Currently on Task 2 – Feasibility Analysis
  - Analysis Results – TAC#3



Thank you!

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26