

Countywide Water Reuse Master Plan Update

Board of Directors Meeting

February 26, 2019

Outline

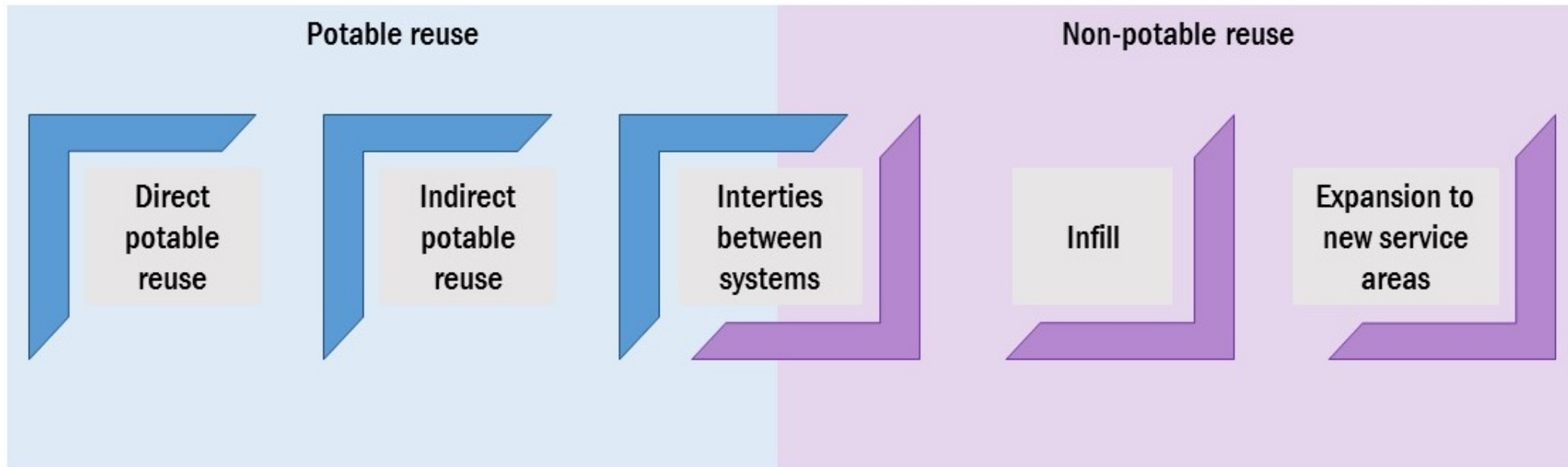
1. Background and Purpose
2. Regulatory Framework
3. Baseline Analysis
4. Project Portfolios
5. November 2018 Recycled Water Committee Recommendations
6. Reuse Master Plan Next Steps
7. Staff Recommendations

Drivers

- Fulfillment of CEO Interpretation of **Board Governance Policy**:
 - Meet 10% of County's total water demands using water reuse
- Alignment with **Water Supply Master Plan** update:
 - Investment in water recycling (24,000 AFY of potable reuse)
 - Diversity of water supply alternatives (local control)
 - Meeting service area demands (resiliency during drought)

Purpose

Improve water supply reliability through water reuse in collaboration with multiple stakeholders.



Portfolios will reflect a combination of potable and non-potable reuse.

Objectives

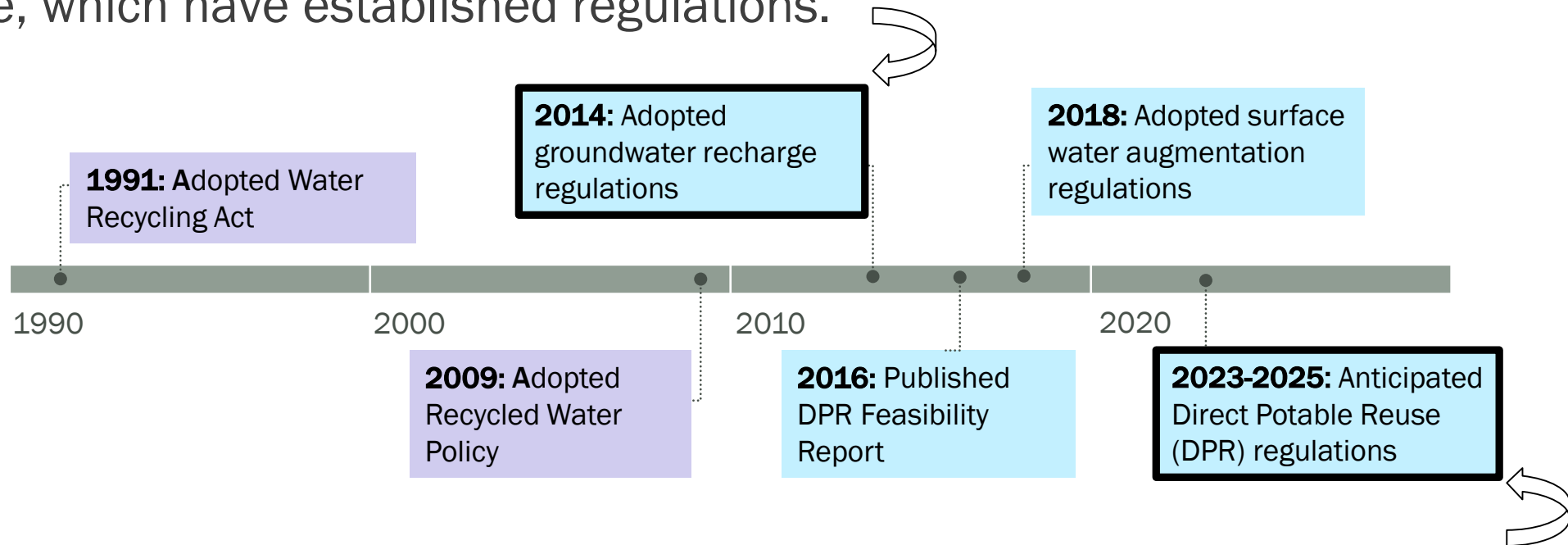
- Identify **water available** for potable and non-potable reuse
- Evaluate options for **system integration**
- Guide expansion via **interagency agreements** and **governance structures**
- Generate support by **engaging stakeholders**



Stakeholders at a 2018 meeting in District HQ

California Regulatory Framework

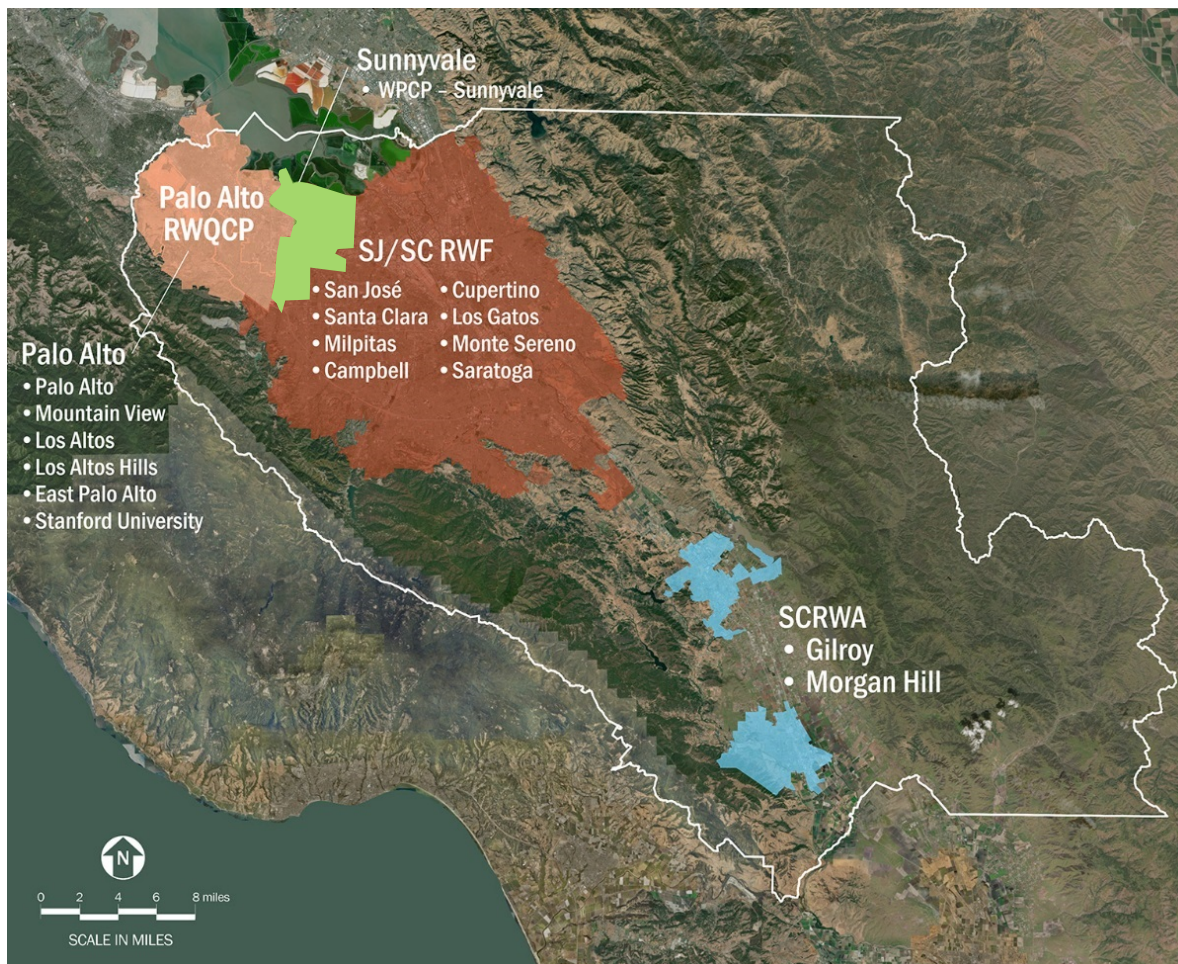
- Reuse Master Plan primarily consists of non-potable reuse expansion and groundwater recharge, which have established regulations.



- Potential for direct potable reuse is also included. Regulations are under development.

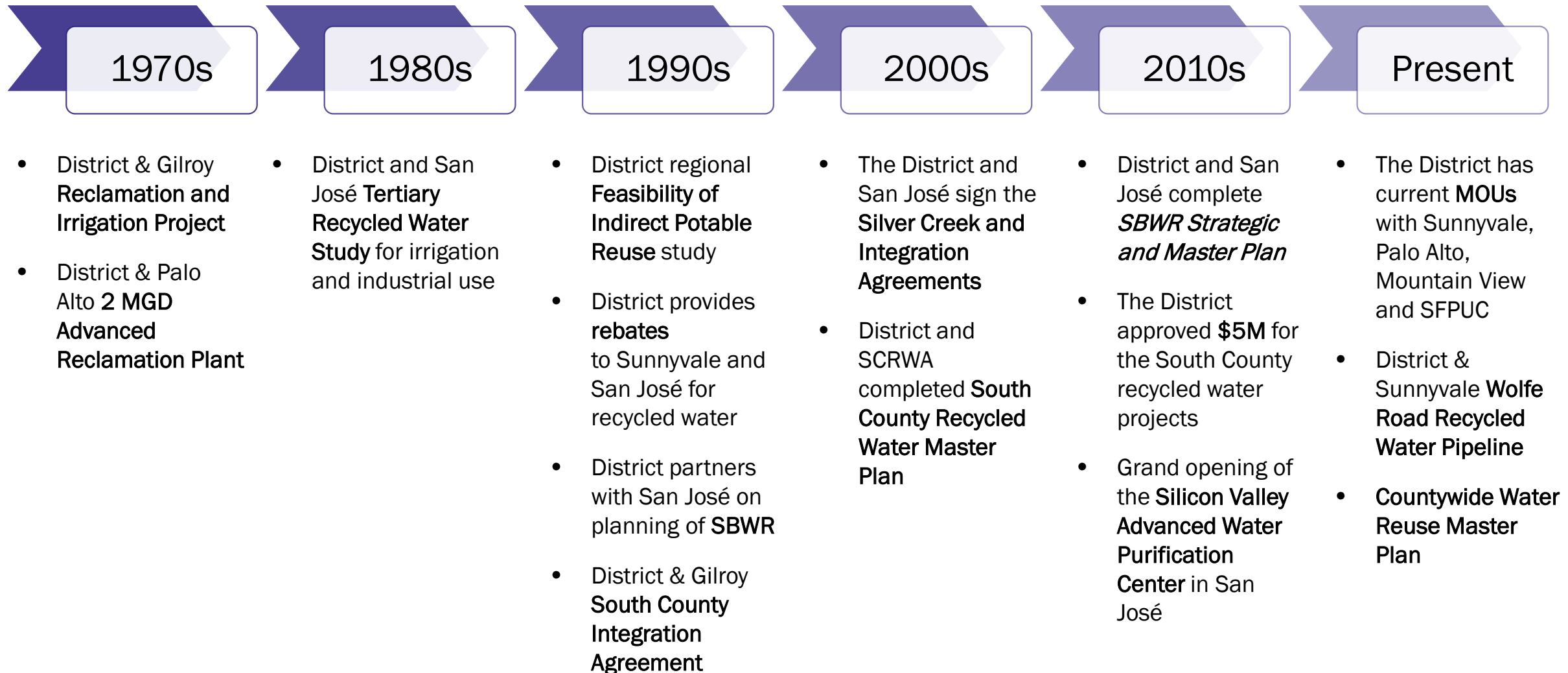
Potential Water Reuse Partners

- Palo Alto Regional Water Quality Control Plant (RWQCP)
- Sunnyvale Water Pollution Control Plant (WPCP)
- San José-Santa Clara Regional Wastewater Facility (SJ/SC RWF)
- South County Regional Wastewater Authority (SCRWA) WWTP



* Figure is for illustration purposes. Boundaries are not exact.

History of Water Reuse Collaboration – 50 Years



Stakeholder Engagement

32 meetings/workshops planned

Project Start
(2018)

Final Report
(Fall 2019)



Stakeholder Task Force

Representing interests/organizations:

- Business/economy
- Chambers of Commerce
- Planning
- Public policy
- Environment
- Environmental justice
- Medical community
- Diversity
- Stormwater
- Groundwater
- Ratepayers
- Other water and recycled water suppliers/agencies/organizations

Board of Directors

Board committees

- Recycled Water Committee (RWC)
(District Board only)
- Joint Committees
(District Board and Partner Agency city council members)

Executives

- One-on-one meetings
- Executive Leadership Group (ELG)

Staff

- Project Partner Group (PPG)

Regulators

Independent Advisory Panel (IAP)

Public

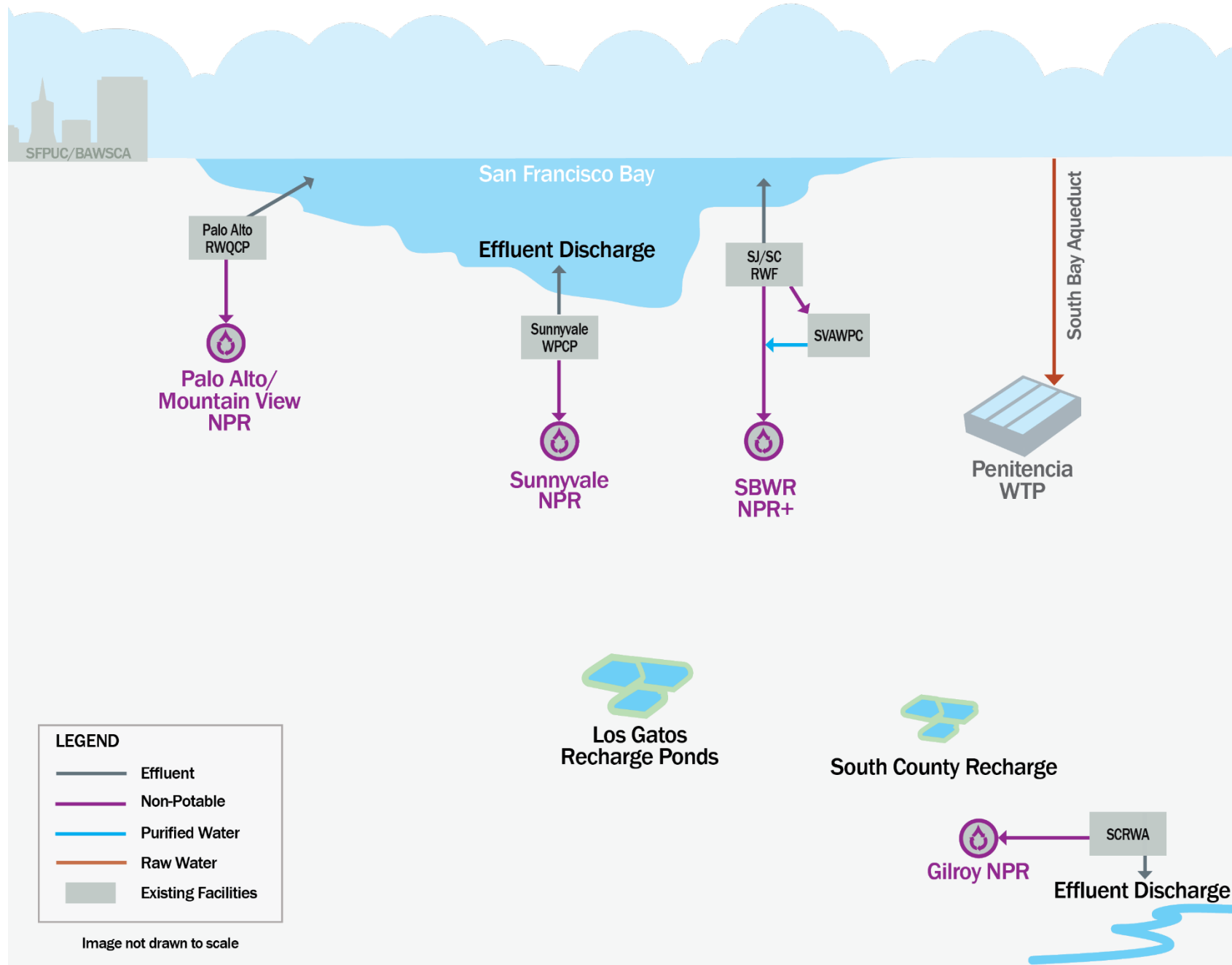
20+ meetings in 2018 with 50+ organizations

- 1 meeting of the Board of Directors ([1/23/2018](#))
- 1 update to the District Board and Sunnyvale City Council ([12/17/2018](#))
- 3 updates to the Recycled Water Committee
- 2 updates to the Joint Recycled Water Committee with City of Palo Alto
- 1 meeting of the Joint Water Resources Committee with Gilroy and Morgan Hill
- 1 meeting of the Joint Recycled Water Policy Advisory Committee with San José
- 4 meetings or conferences with the Project Partner Group
- 1 meeting of the Stakeholder Task Force
- 6 one-on-one meetings with agencies
- 2 meetings with water retailers

Planning Framework (developed through stakeholder process)

- Develop 24,000 AFY of potable reuse supply
- Expand countywide reuse (non-potable and/or potable reuse) with Partner Agencies
- Consider new projects and previously explored projects
- Leverage existing infrastructure where possible
- Reflect a combination of non-potable reuse and potable reuse projects

Baseline Conditions



Portfolios*

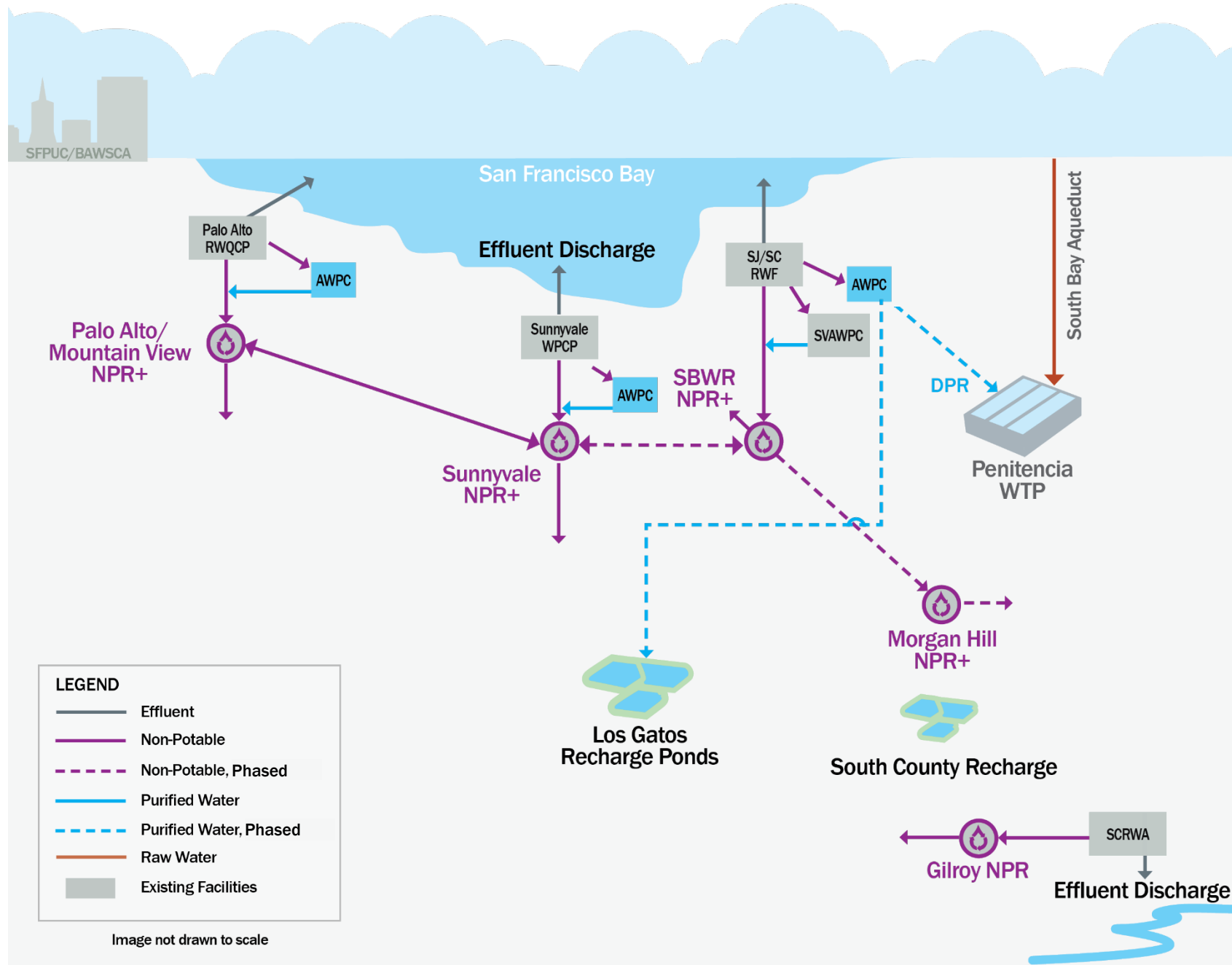
- Portfolio 1 – Phased IPR/DPR (from San José-Santa Clara)
- Portfolio 2 – IPR/Phased DPR (from Palo Alto/Sunnyvale)
- Portfolio 3 – IPR (from Palo Alto/Mountain View)
- Portfolio 4 – IPR/Phased DPR (from Palo Alto/Sunnyvale), IPR (from Morgan Hill)
- Portfolio 5 – IPR (from Morgan Hill), Phased DPR (from San José-Santa Clara)

IPR = indirect potable reuse

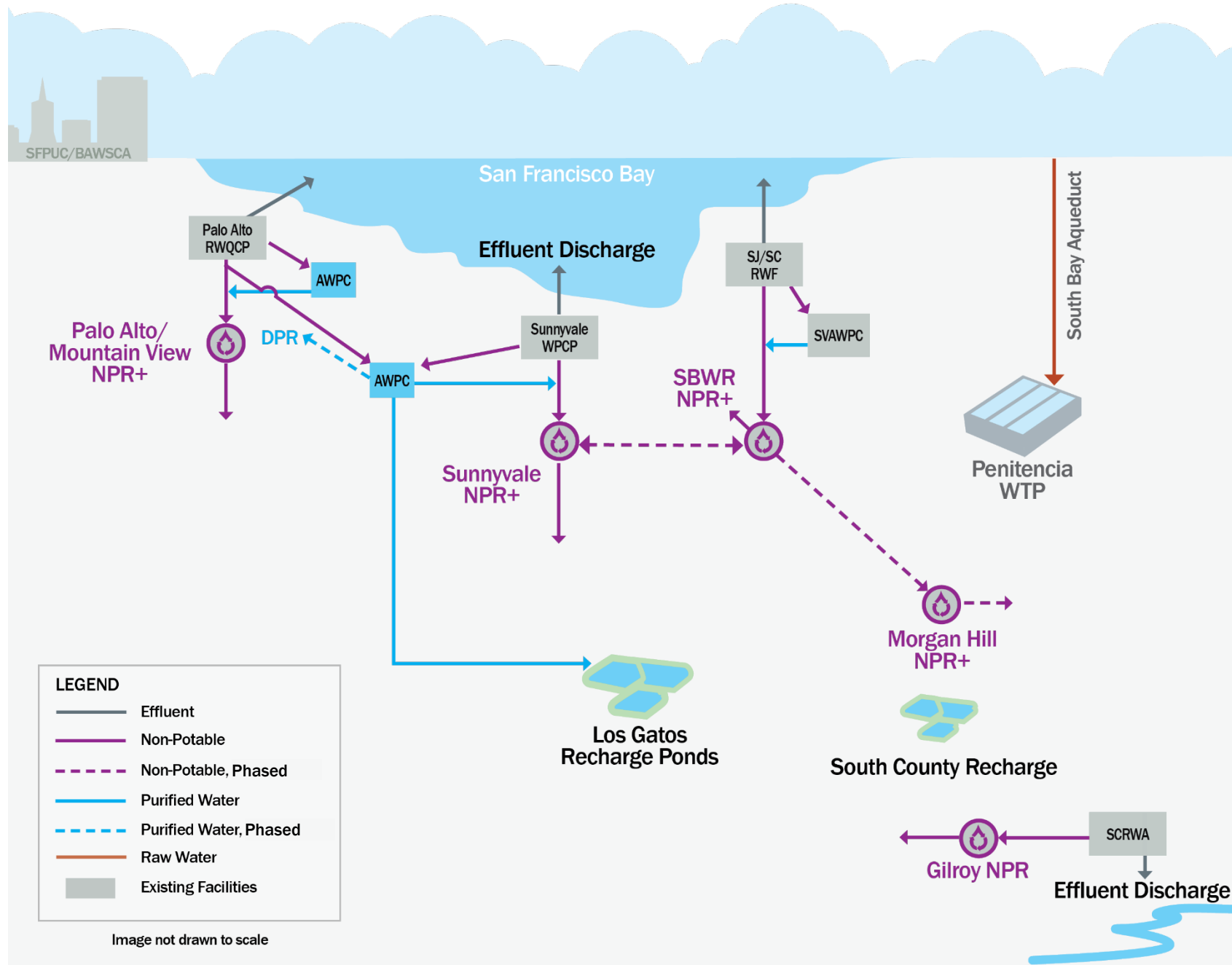
DPR = direct potable reuse

*Expanded non-potable reuse is included in all Portfolios

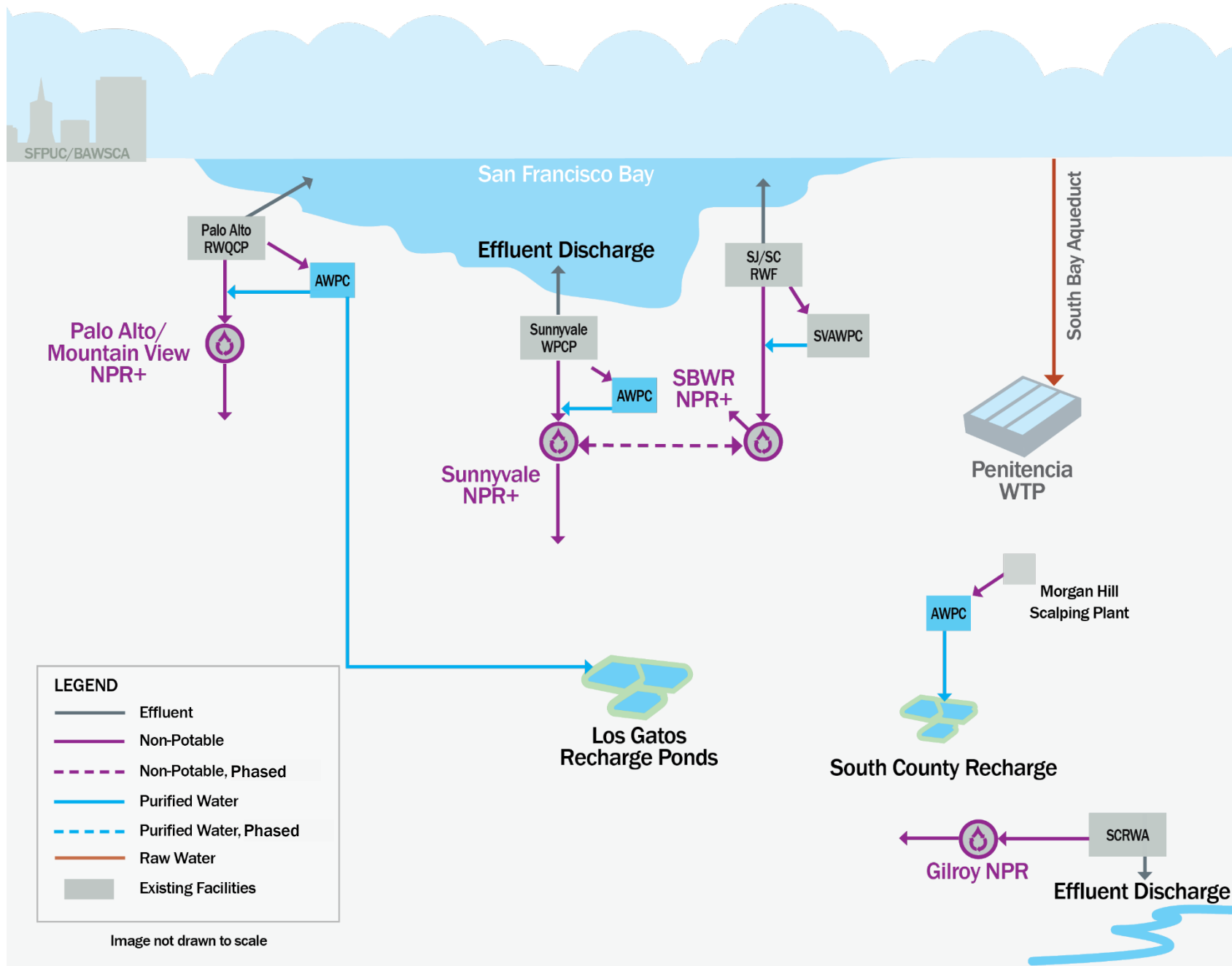
Portfolio 1 – Phased IPR/DPR (from San José-Santa Clara)



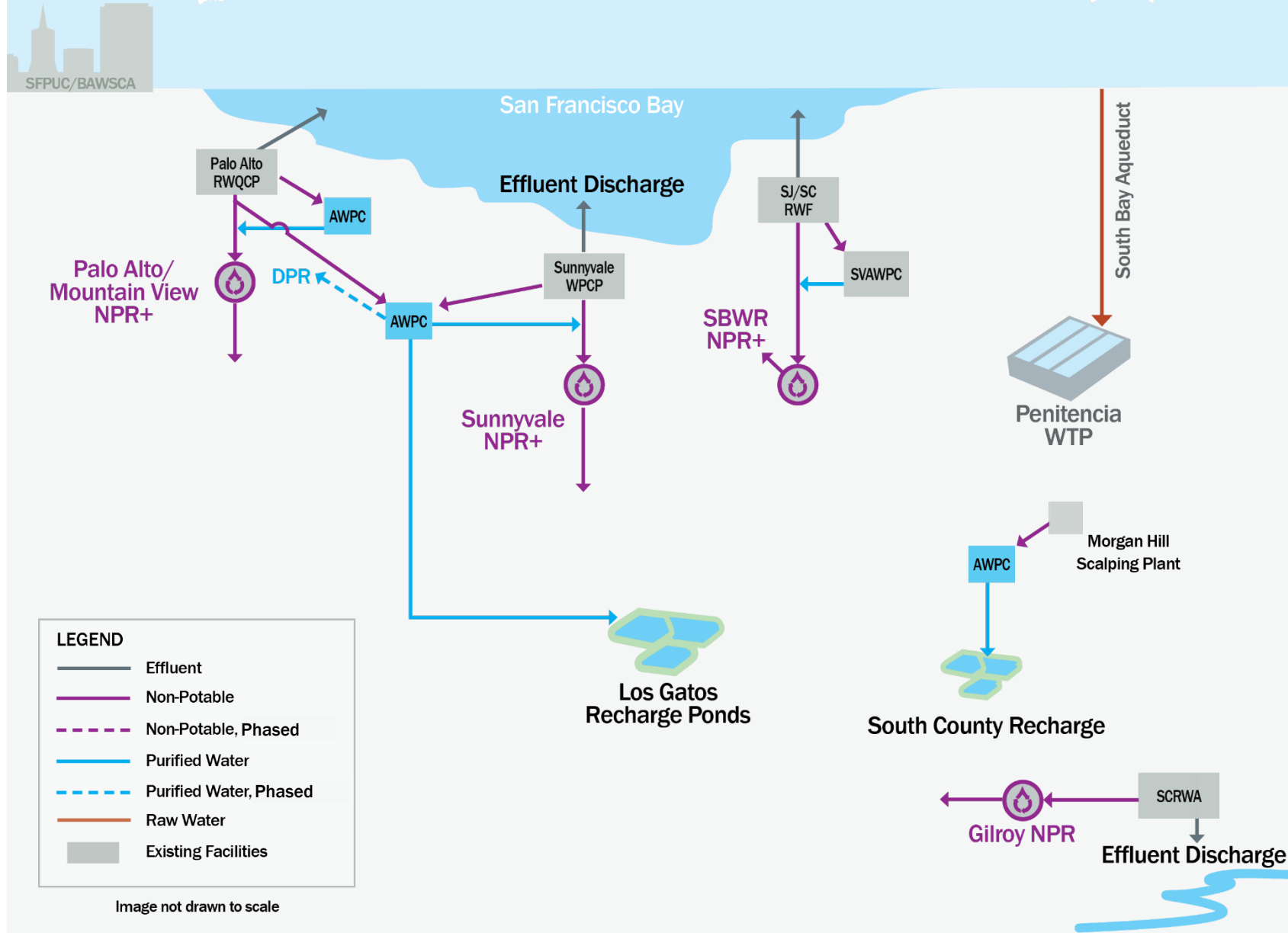
Portfolio 2 - IPR/Phased DPR (from Palo Alto/Sunnyvale)



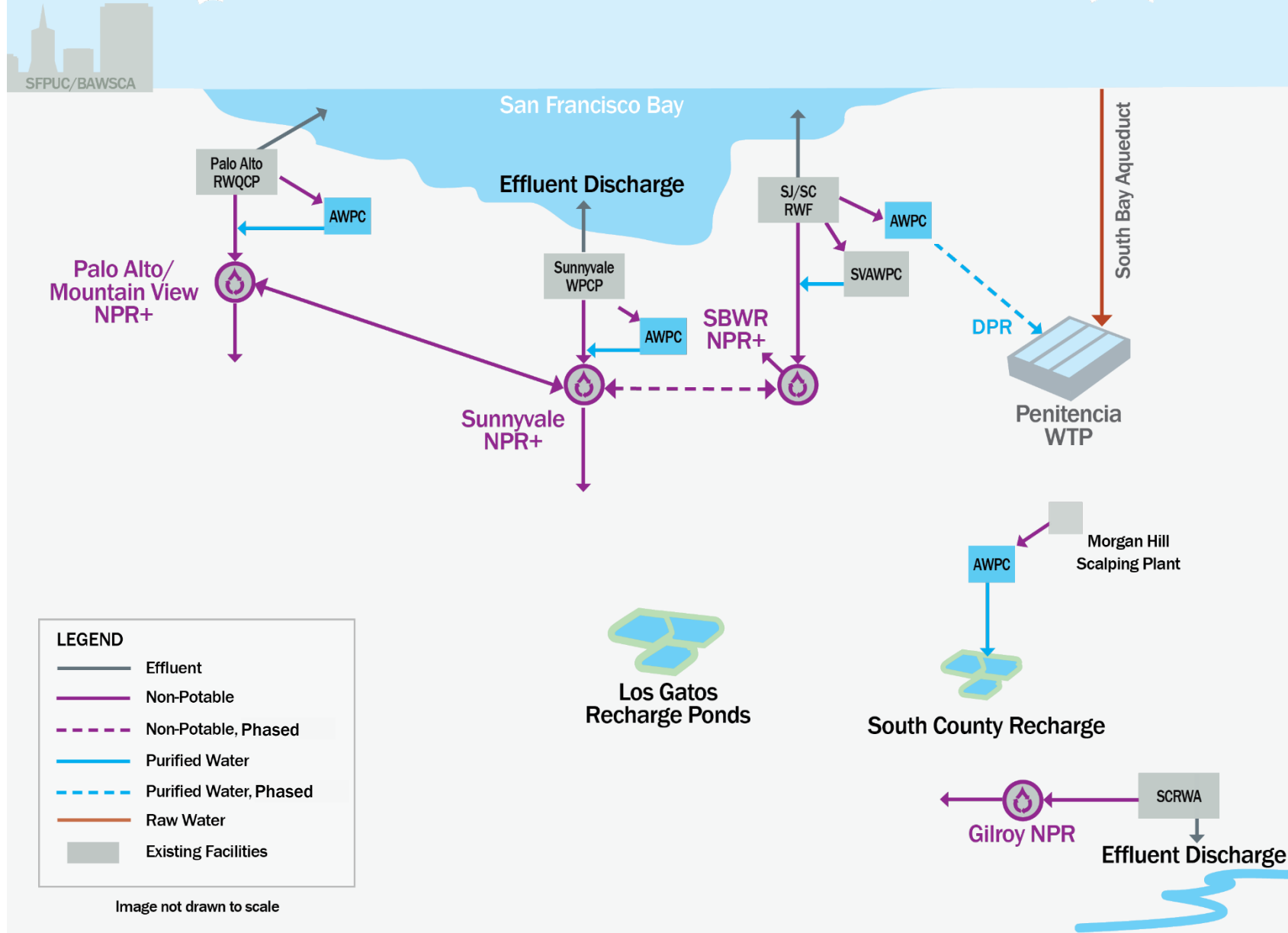
Portfolio 3 – IPR (from Palo Alto/Mountain View)



Portfolio 4 – IPR/Phased DPR (from Palo Alto/Sunnyvale), IPR (from Morgan Hill)



Portfolio 5 – IPR (from Morgan Hill), Phased DPR (from San José-Santa Clara)



Feedback on Portfolios from October 25, 2018 Project Partner Group meeting

- Consensus (w/ some reservations) on Portfolios 1, 2, and 4
- Next steps:
 - Estimate costs and impact to water rates/local economy
 - Develop reverse osmosis concentrate management plans



Provide direction regarding November 2018 recommendations from the Recycled Water Committee

Countywide Water Reuse Master Plan

- Add Rate Payer Advocate Group to Stakeholder Task Force
- Develop matrix summarizing status of potential partners
- Coordinate Reuse Master Plan with Water Supply Master Plan
- Review criteria/scoring of Portfolios
- Add “work with willing partners” concept to Guiding Principles

Provide direction regarding November 2018 recommendations from the Recycled Water Committee

Purified Water Program Public-Private Partnership (P3)

- Alternatives for achieving comprehensive agreements with wastewater partner agencies

Site-specific Recycled Water

- Discuss on-site water reuse guiding principles with Committee
- Feasibility of providing recycled water to Vallco

Next Steps for the Reuse Master Plan include:

1. Develop Portfolios (Winter 2019)
2. Refine Portfolios (Spring 2019)
3. Draft Reuse Master Plan Report (Summer 2019)
4. Finalize Reuse Master Plan Report (Fall 2019)

Amendments to Consultant Agreements

- For additional planning flexibility, **three** portfolios will be included in the final Reuse Master Plan (instead of **one** recommended portfolio).
- Additional meetings with Partner Agencies and stakeholders have been required to address complex technical issues.
- Agreements with Brown & Caldwell for the *Reuse Master Plan* and with GHD for the *Reverse Osmosis Concentrate Management Plan* may require scope, schedule and budget modifications to support additional complexity.

Staff Recommendations to the Board:

1. Provide direction regarding November 14, 2018 recommendations from the Recycled Water Committee; and
2. Provide direction regarding the ongoing development of the Countywide Water Reuse Master Plan.