

SMCFD WRF Expansion Design RFQ Pre-Submittal Meeting

January 10, 2023



Presented by:

Darron Anglin, PE

District Manager

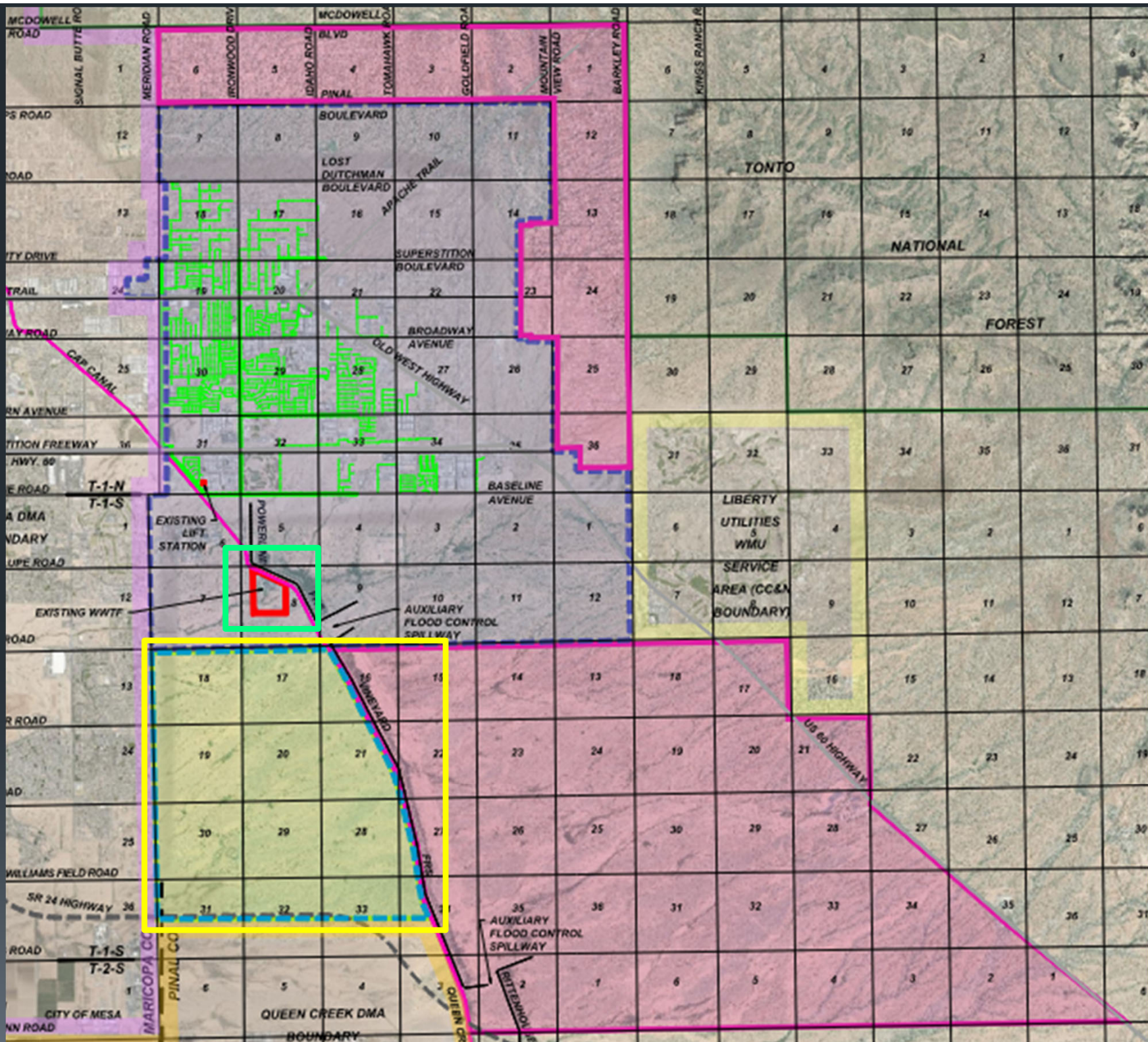
About us



- ❖ SMCFD was formed as a Special Purpose District by the Apache Junction City Council in 1992 to provide regional wastewater collection and treatment
- ❖ We are governed by a volunteer Board of Directors who are appointed by City Council and serve 6 year terms
- ❖ Our authority to provide these services is granted by the City, which is the Designated Management Agency (DMA)

About us

- ❖ Our current customer count, north of Baseline Avenue, is approximately 7,400, and our current average daily flow is 1.6 MGD
- ❖ Our Service Area was expanded in 2022 to include 11 square miles of Arizona State Land to be developed as a Master Planned Community known as Superstition Vistas
- ❖ In order to serve the expanded service area, which will include nearly 11,000 homes in the first phase, SMCFD's WRF will require expansion to 6.0 MGD in the near future



Flow Projections

- ❖ Existing flows – 1.6 MGD
- ❖ Current permitted capacity – 2.1 MGD
- ❖ Rerating (2023) – 3.0 MGD
- ❖ SV Phase 1 – 2.91 MGD

These flows do not include pending development north of Baseline Avenue.

Current Processes

- ❖ Baseline Pump Station
- ❖ Headworks
 - Mechanical bar screen and grit classifier
- ❖ Septage Receiving Station
- ❖ Aeration
 - Two extended aeration, activated sludge basins
 - Upgrades for rerating from 2.1 to 3.0 MGD
- ❖ Clarifiers – three for each aeration basin
- ❖ Tertiary disk filter and disinfection

Current Processes

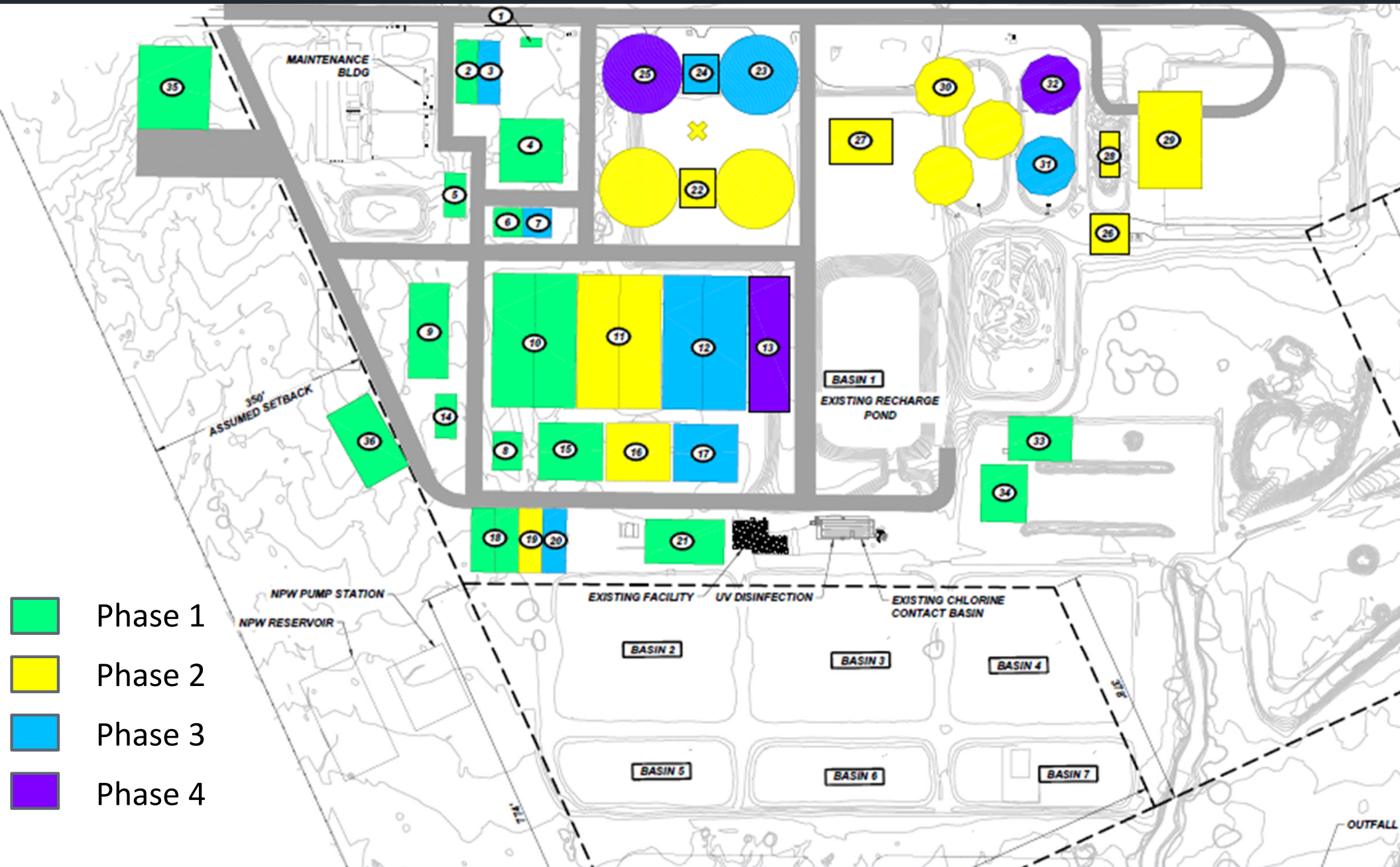
❖ Solids Handling

- Two sludge lagoons
- Polymer system
- Six sand drying beds and two solar drying beds

❖ Effluent Management

- 11 recharge basins
- Intermittent discharge to Weekes' Wash tributary
- Non-potable reuse in conjunction with AJWD
(future)





SMCFD Priorities

- ❖ Parallel treatment systems
- ❖ Effluent management / direct potable reuse
- ❖ Odor control
- ❖ Septage receiving
- ❖ Adequate training for staff on new technologies

Questions

