



Climate Change Plan

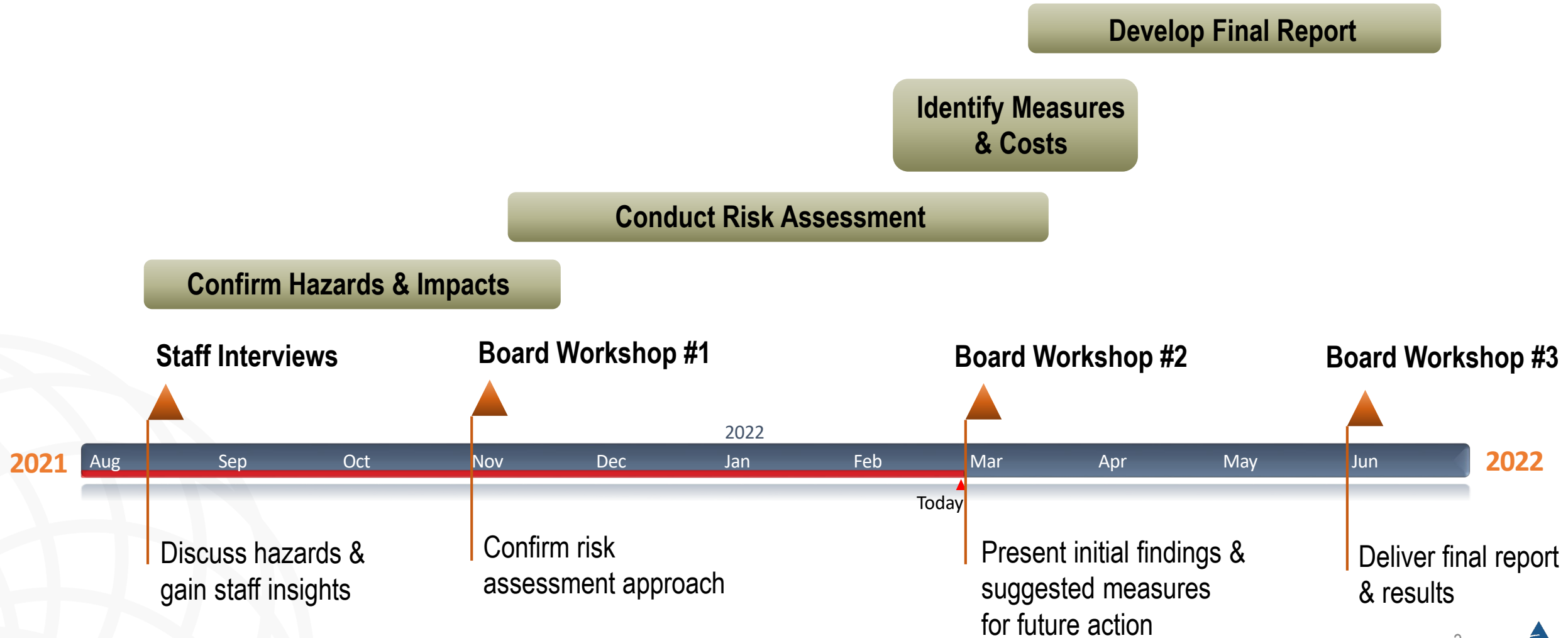
Napa Sanitation District

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Purpose of Today's Briefing

- Summary of risk assessment findings
 - Focus on wildfire/PSPS (power outages) and sea level rise
 - Draft conclusions
- Initial recommendations for future work
- Next steps & schedule

Background & Work to Date



Risk Assessment Findings

*Aggregated for all
NapaSan assets
(2040-2050)*



Sea level rise



GW level rise








Wildfire/PSPS



Precipitation changes

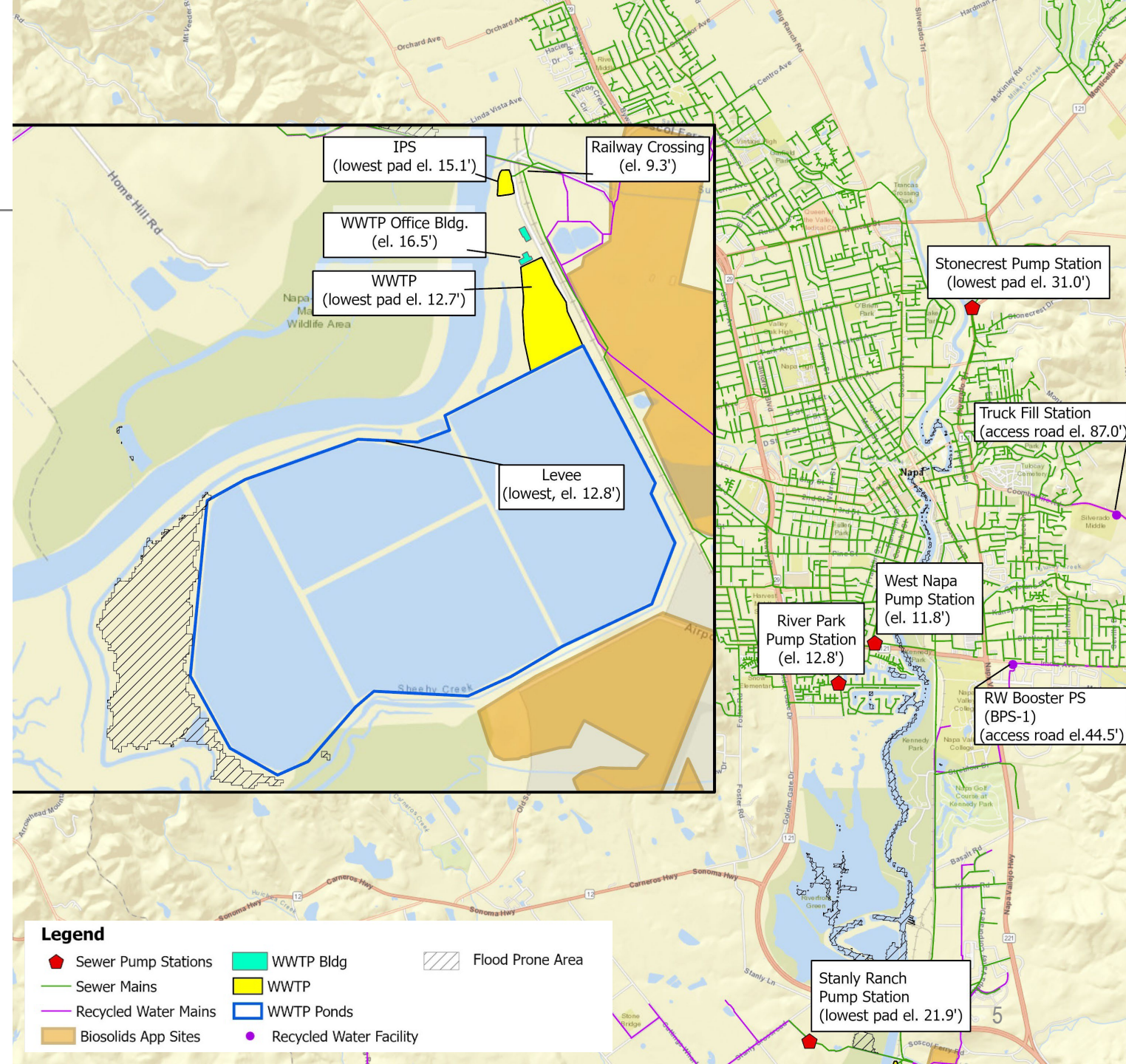


Temperature increase

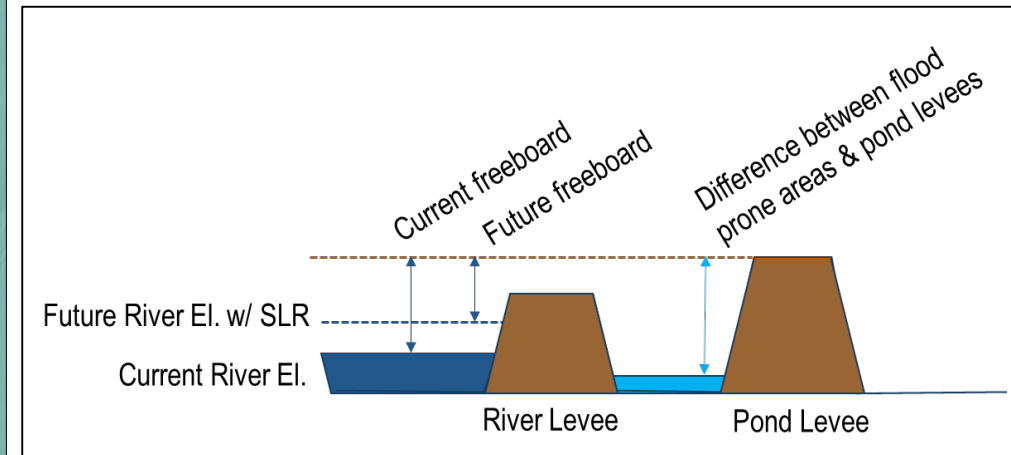
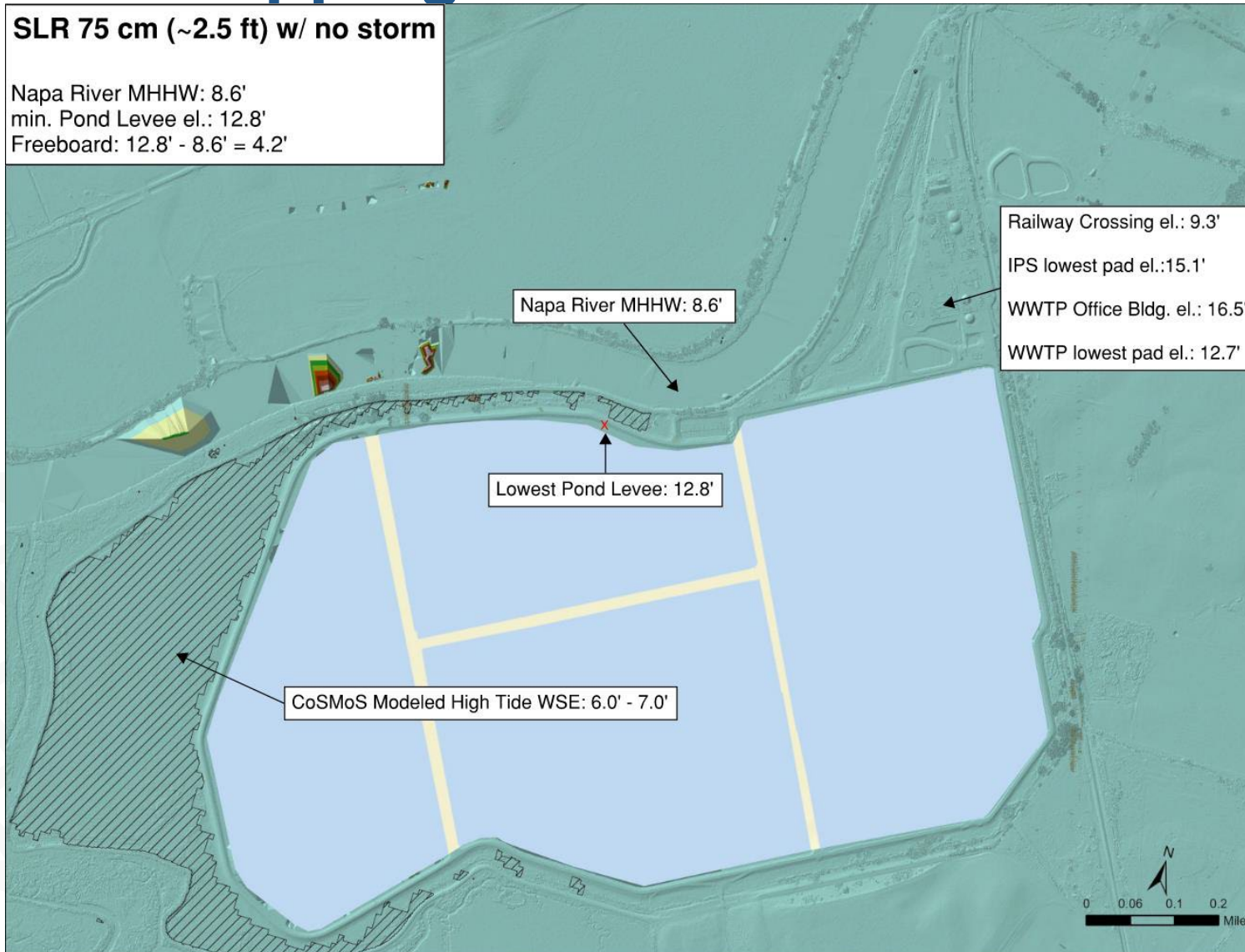
Certainty (probability, likelihood)	Almost certain				
	Likely				
	Possible		 		
	Unlikely				
		Low	Medium	High	Extreme
		Severity (consequence, magnitude)			

Sea Level Rise

- ~1 foot of rise expected by 2040/2050 with 30% probability
- Impacts already seen at railroad crossing
- Biggest future impacts around ponds, plant, and office building

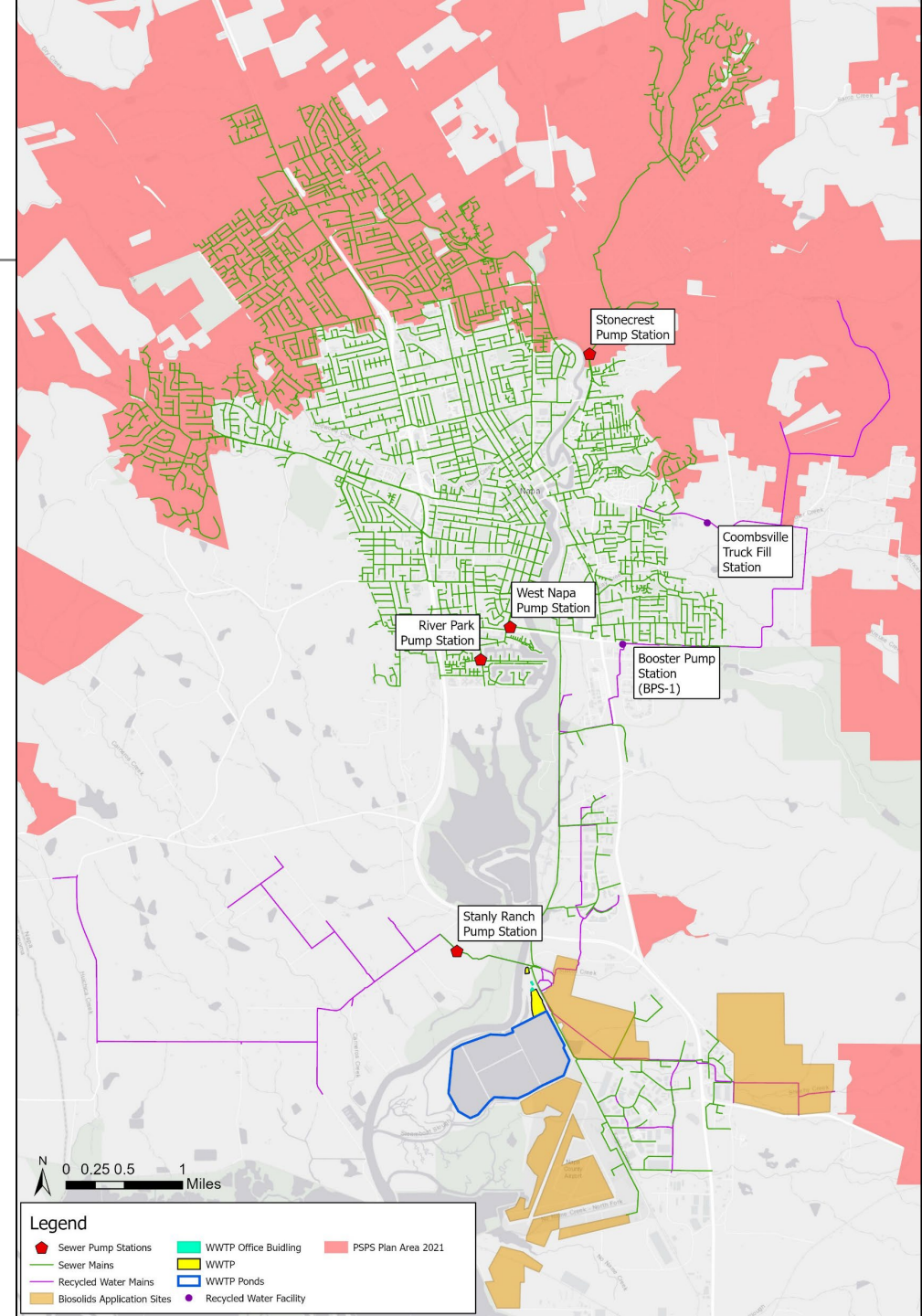


Mapping Freeboard with Sea Level Rise in 2100



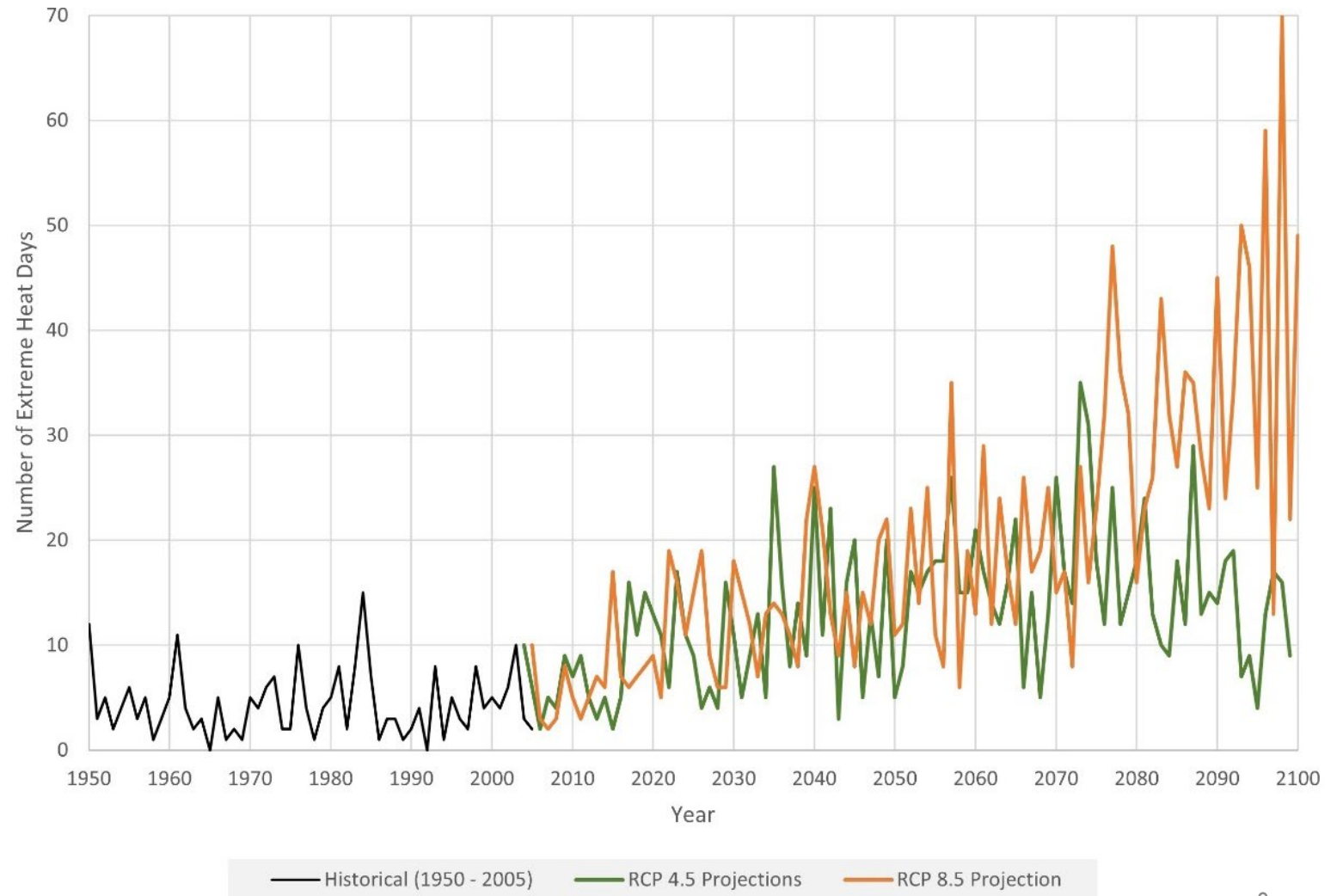
PSPS & Other Sources of Power Outages

- PSPS is not a major concern for majority of facilities
 - Low likelihood of PSPS
 - Existing fuel storage reduces vulnerability
- Wildfires could have broader power supply implications beyond PSPS



Extreme Heat Days (>104°)

- Electrical equipment standard rating of 104 °F
- Frequency of facility shutdowns could increase with higher likelihood of overheating



Initial Assessment Conclusions

- Assessment does not indicate that any immediate capital investments need to be made
- Extreme weather will dominate impacts to the system
 - High tides, storms, flooding (exacerbated by sea level rise)
 - Extreme heat
- NapaSan can consider taking some initial planning steps to avoid the need for immediate, costly “red-flag” actions

Initial Recommendations

- Plan for secondary access to the plant to leverage existing relationships
 - Ultimate improvements would include building secondary access
- Future-proof planning/design criteria
 - Track ASCE/NOAA partnership to update codes & standards
 - Apply updated criteria to near-term capital projects
- Refine O&M practices related to load shedding and backup power
 - Draft written load shedding procedures supporting staff
 - Consider opportunistically increasing fuel storage at the plant and/or trailer mounted fuel tank
- Revisit climate change analysis periodically
 - Collect anecdotal data to support effort
 - Participate in local & regional climate efforts

Next Steps

- Finalize list of recommended actions
- Prepare Climate Change Plan summarizing findings
- Hold final Board update (June 15)

Project complete by end of Fiscal Year

Thank you! Questions?

