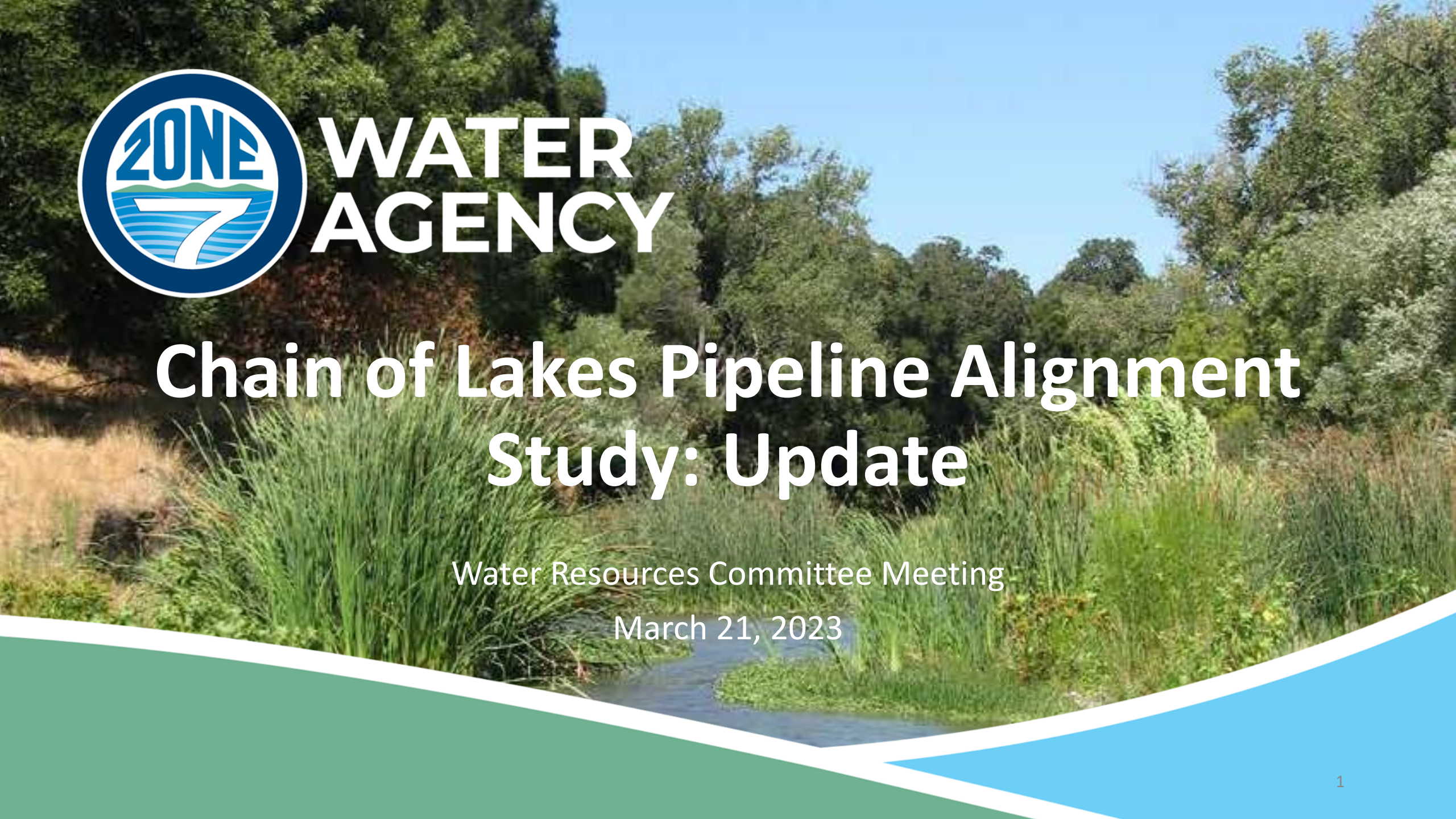


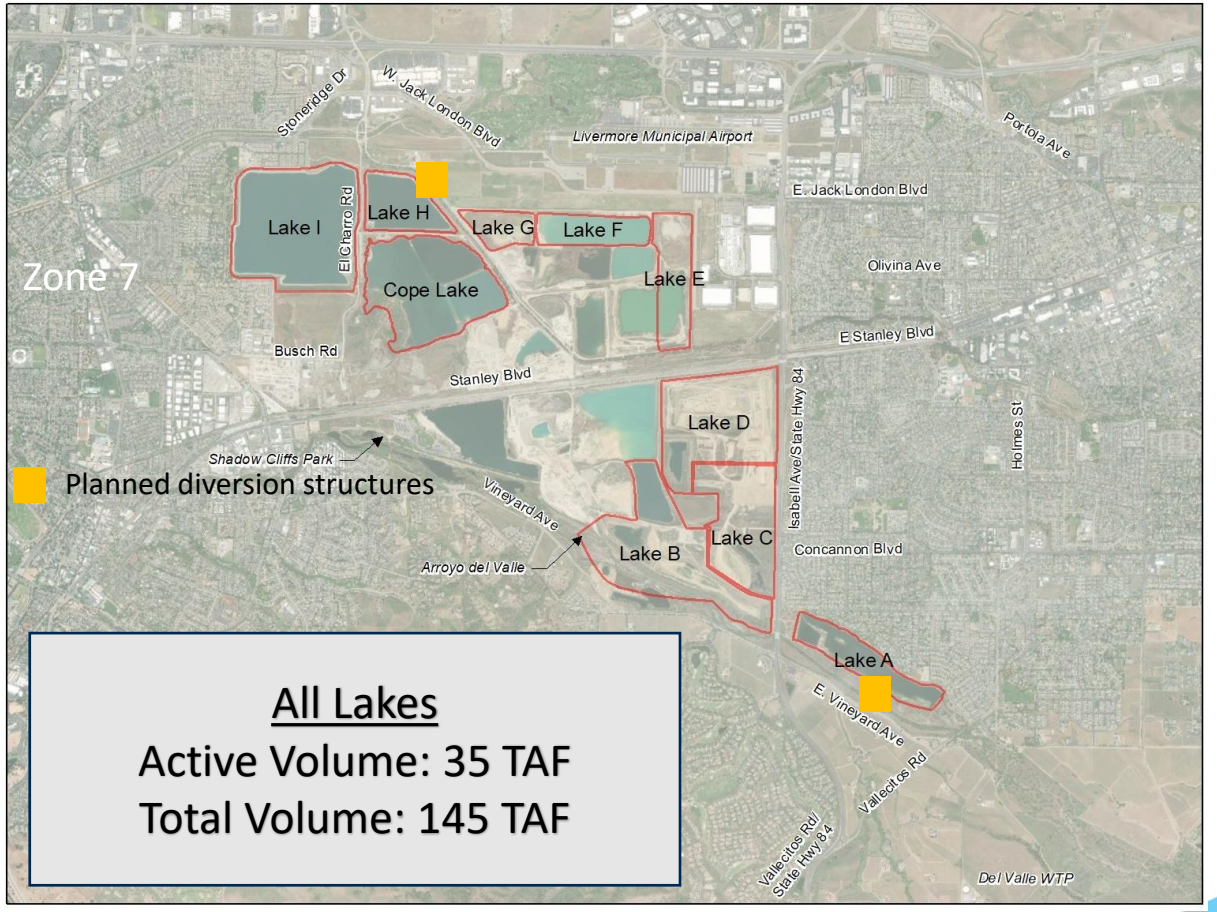
Chain of Lakes Pipeline Alignment Study: Update

Water Resources Committee Meeting

March 21, 2023

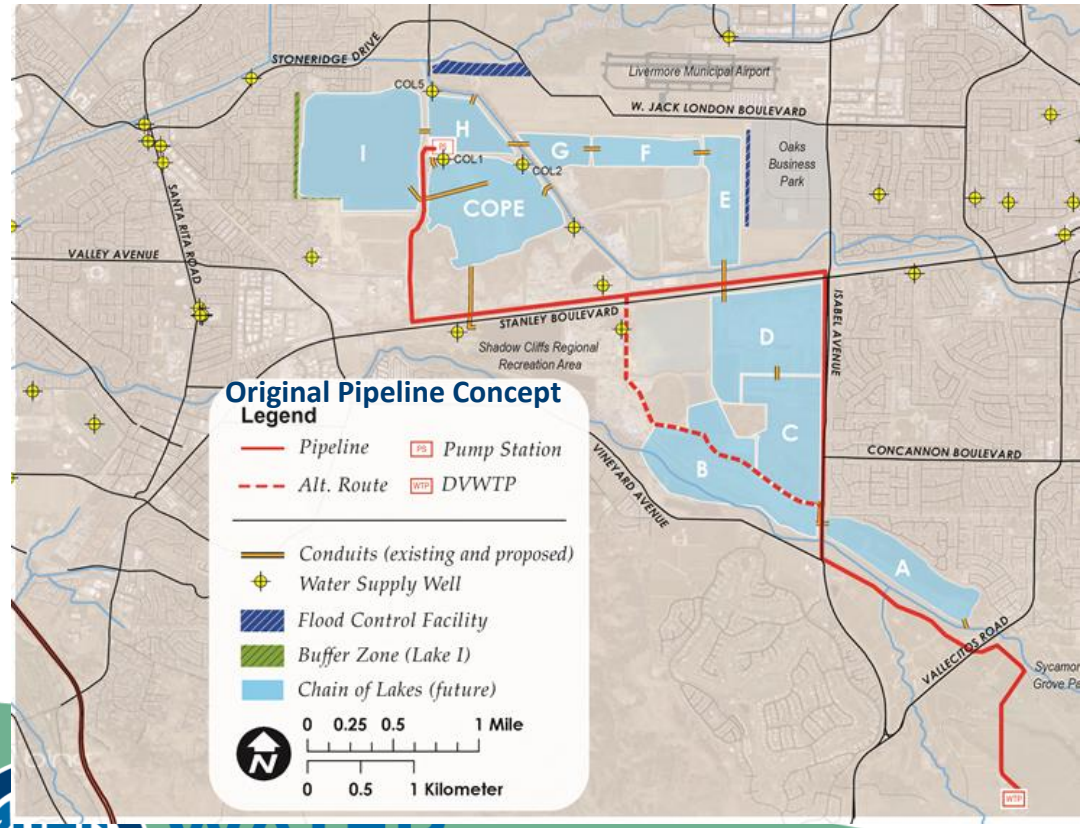
Chain of Lakes

- Zone 7 Board awarded HydroScience the contract in early 2020
- Initial Screening Identified Multiple Routes
- Fatal Flaw Analysis narrowed down to two (East and West)
- Environmental Initial Study determined either route is feasible
- Geotechnical Study Informed Trenchless Crossings (4)
- Shortest Route was selected as Preferred Alignment
- Hydraulic Analyses were performed
- Cost Estimates for several pipe sizes were generated



Solution: COL Pipeline

Multi-use two-way pipeline connecting COL with the SBA and Del Valle WTP (and Lake A to other lakes)



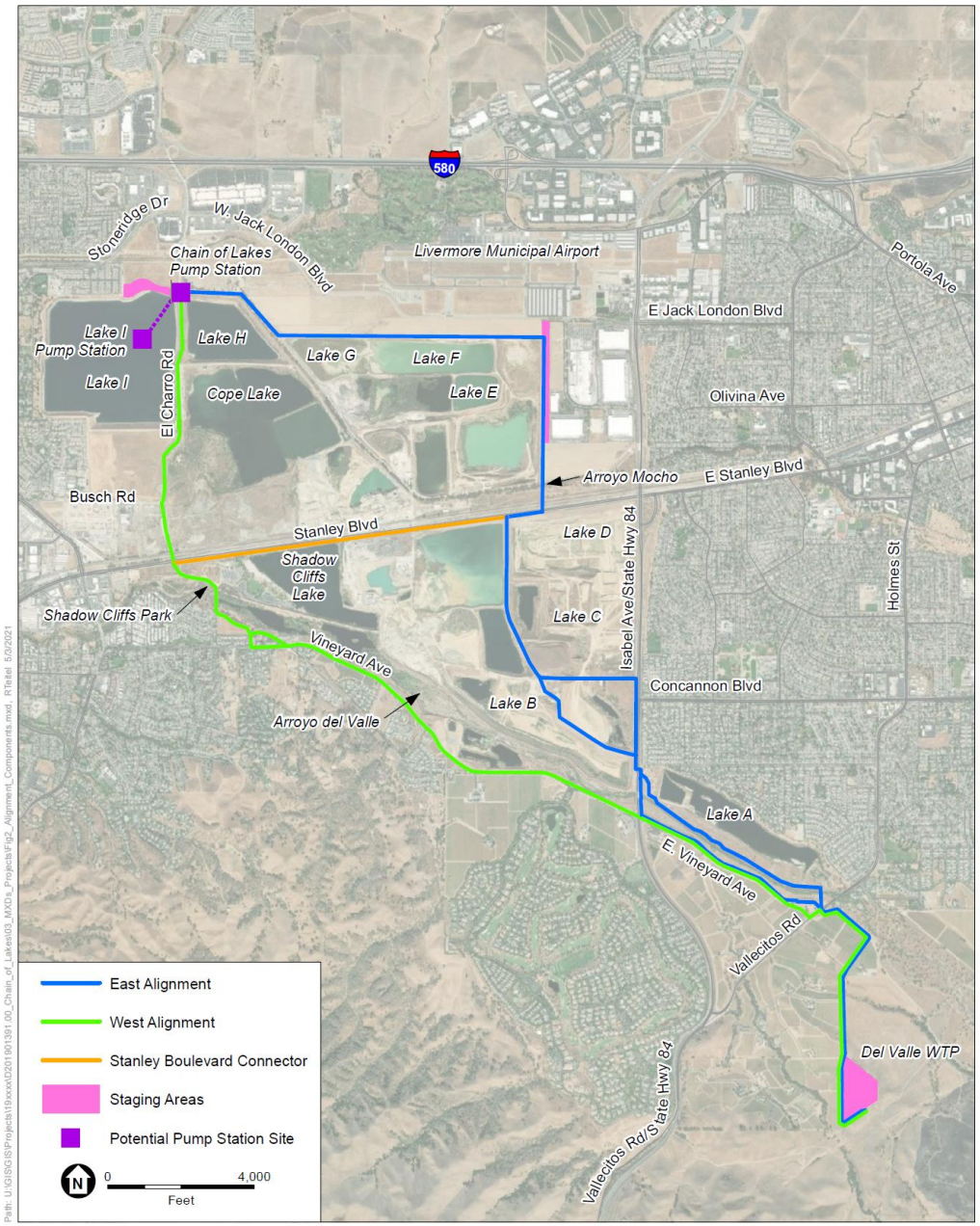
- Convey water to (and within) COL for storage and recharge
  - Store excess State Water Project (SWP) Table A allocation and other extra water
  - Access additional groundwater recharge capacity in the lakes
  - Move local storm water captured in LDV to Lake A and Lake I
  - Could potentially convey purified water if potable reuse is implemented
- Provide emergency/drought surface water supply to the Del Valle WTP

COL Pipeline Alignment Study Goals

- Identify the pipeline alignment that best meets the design criteria and other metrics
- Provide the basis for the detailed design, environmental review, and permitting processes.
- Provide conceptual design and cost estimate for preferred alignment

Alignment Selection

- Narrowed down to East (Blue) & West (Green) Alignments
- West Alignment (Vineyard Avenue) is preferred option
- Shortest and Most Feasible Option



SOURCE: ESRI Imagery; ESA 2021

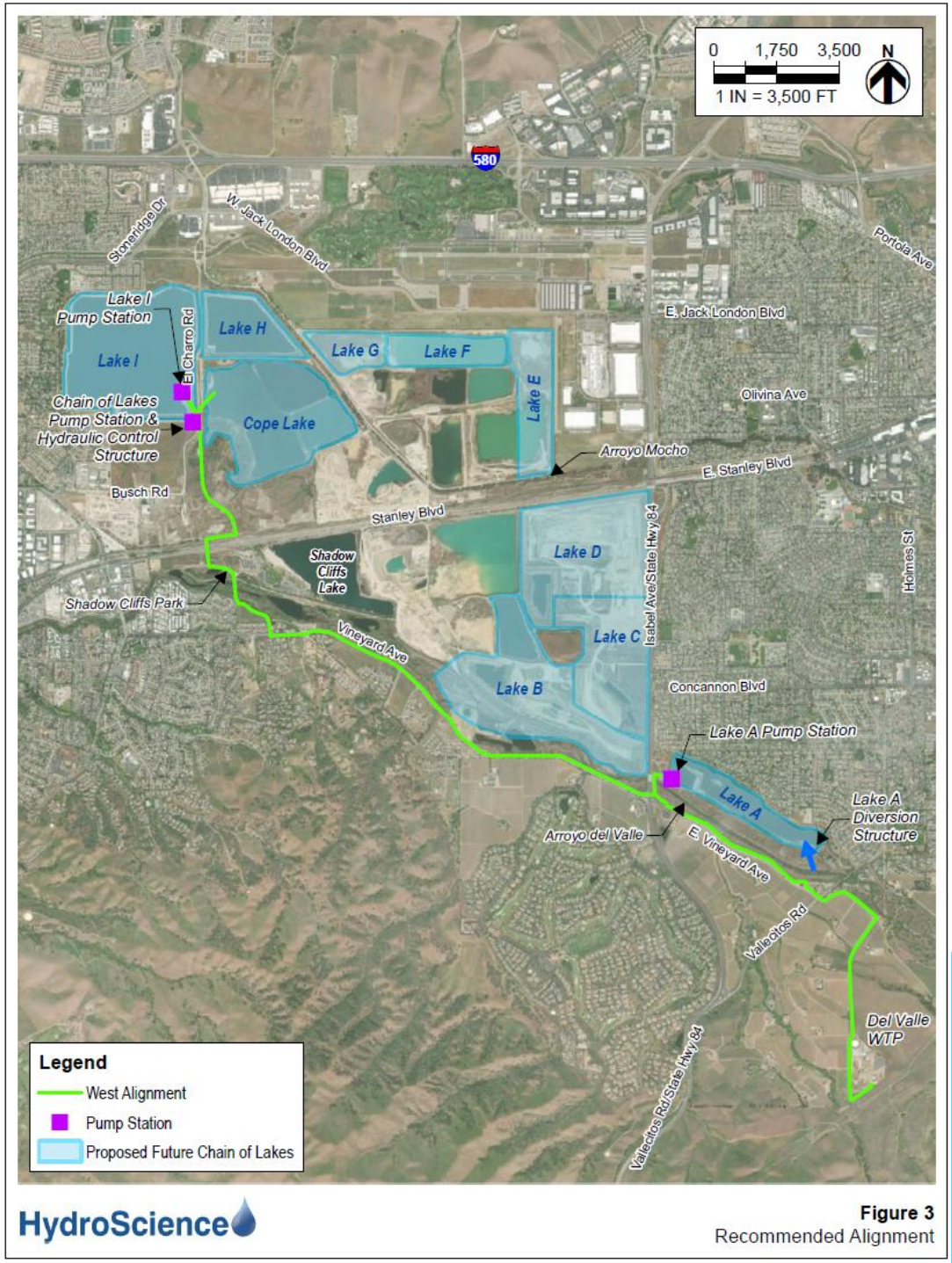
Zone 7 Chain of Lakes Project

Figure 2
COL Alignment/Components

ESA

Alignment Priorities

- Completed: Geotechnical investigation, trenchless evaluation, environmental checklist
- Coordination with Steelwave, Amazon, East Bay Regional Parks District, City of Pleasanton, and City of Livermore
- West Alignment (Vineyard Avenue) is preferred option
- Latest estimate: $92M construction cost (with 30% contingency) plus soft costs for a total of approximately $118M for pipe diameters of 36”/42”



Next Steps (Staff Recommendation)

- Conduct follow-up analysis to evaluate operational schemes and corresponding optimum pipe size
- Explore diversion options, and
- Perform cost-benefit analysis

Q & A