

Los Osos Wastewater Project

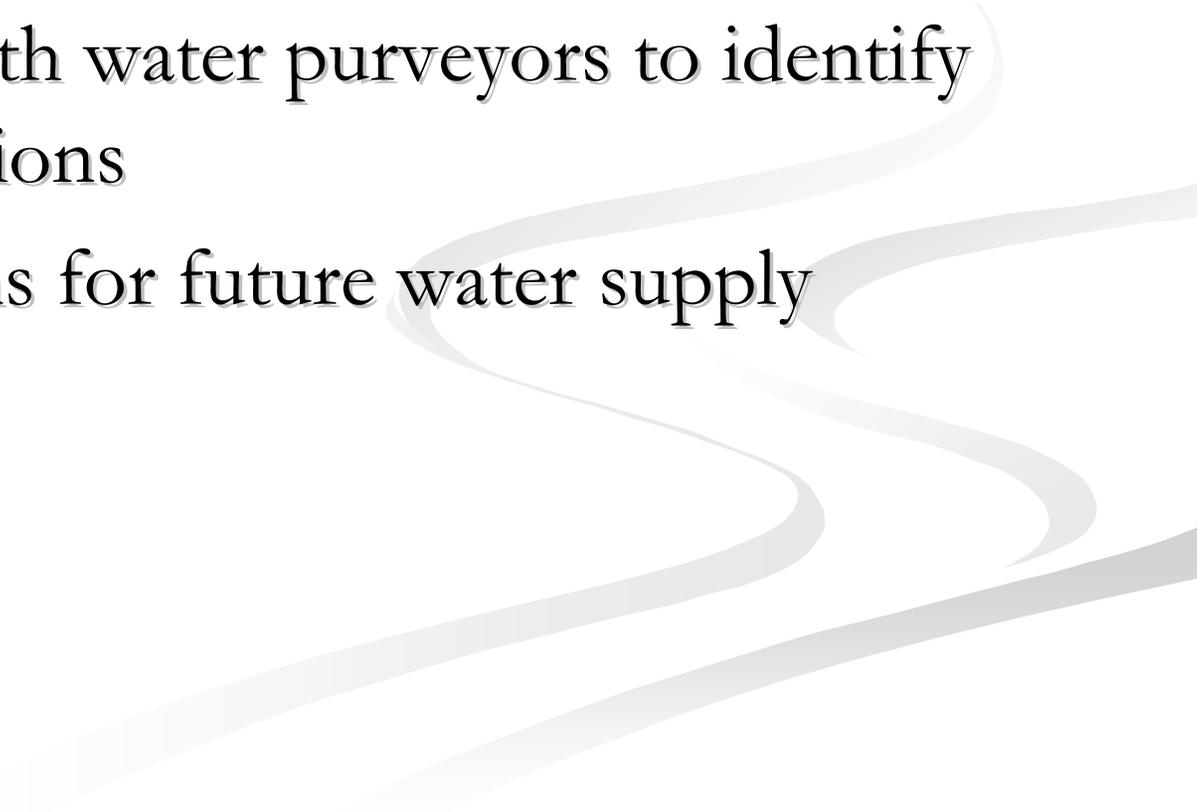
San Luis Obispo County
Department of Public Works

July 15, 2008

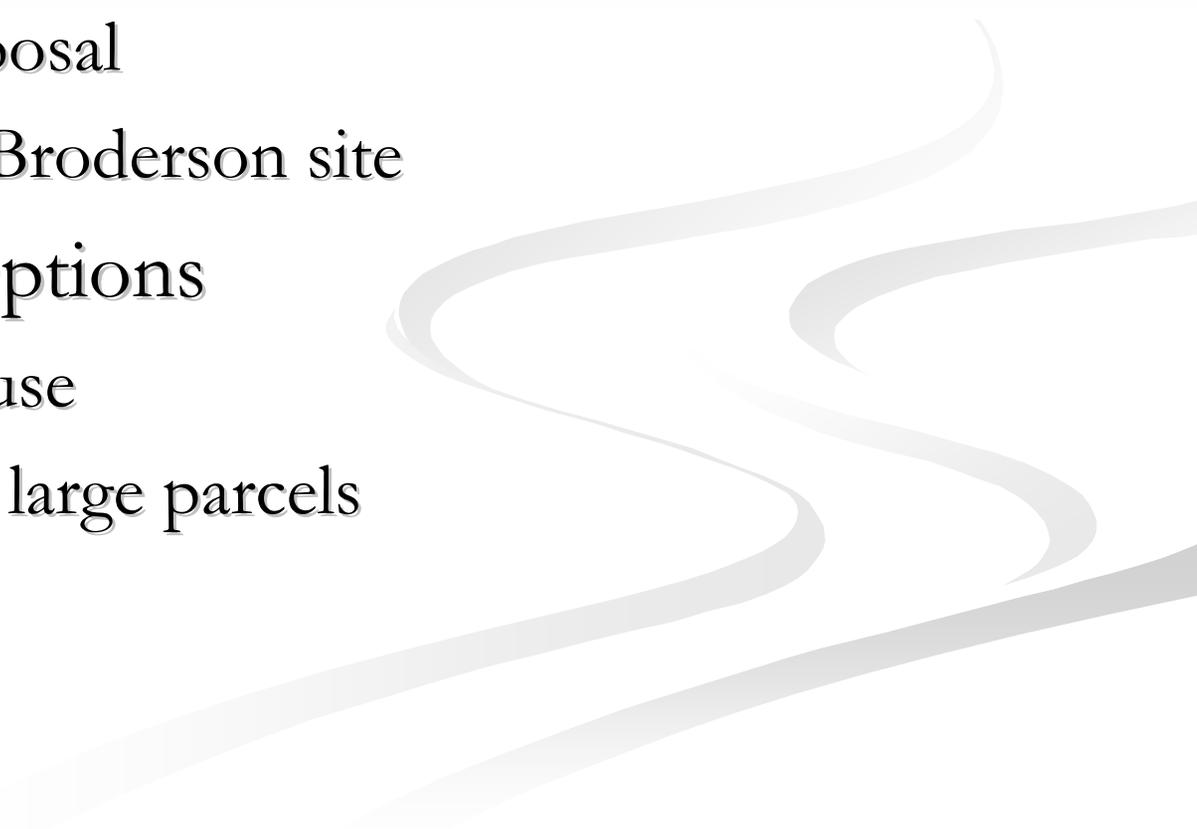
Treated Wastewater Reuse and Disposal

- Current Reuse and Disposal Planning
- Review of Broderson Site Key Issues

Project Approach to Reuse and Disposal of Treated Wastewater

- Flexibility through multiple disposal options
 - Minimize stranded assets
 - Cooperation with water purveyors to identify water reuse options
 - Preserve options for future water supply enhancements
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Project Approach to Reuse and Disposal of Treated Wastewater

- Initial Reuse and Disposal Options
 - Conservation to reduce demand
 - Spray field disposal
 - Percolation at Broderson site
 - Other Viable Options
 - Agricultural reuse
 - Urban reuse at large parcels
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Broderon Site

Development History

- Current Planning by County Public Works
 - 0.4 MGD average capacity
 - 6 acres of sub-surface percolation lines
 - Potential increase over time, based on groundwater monitoring
- Benefits = Water Cycle Sustainability
- Ongoing concerns exist

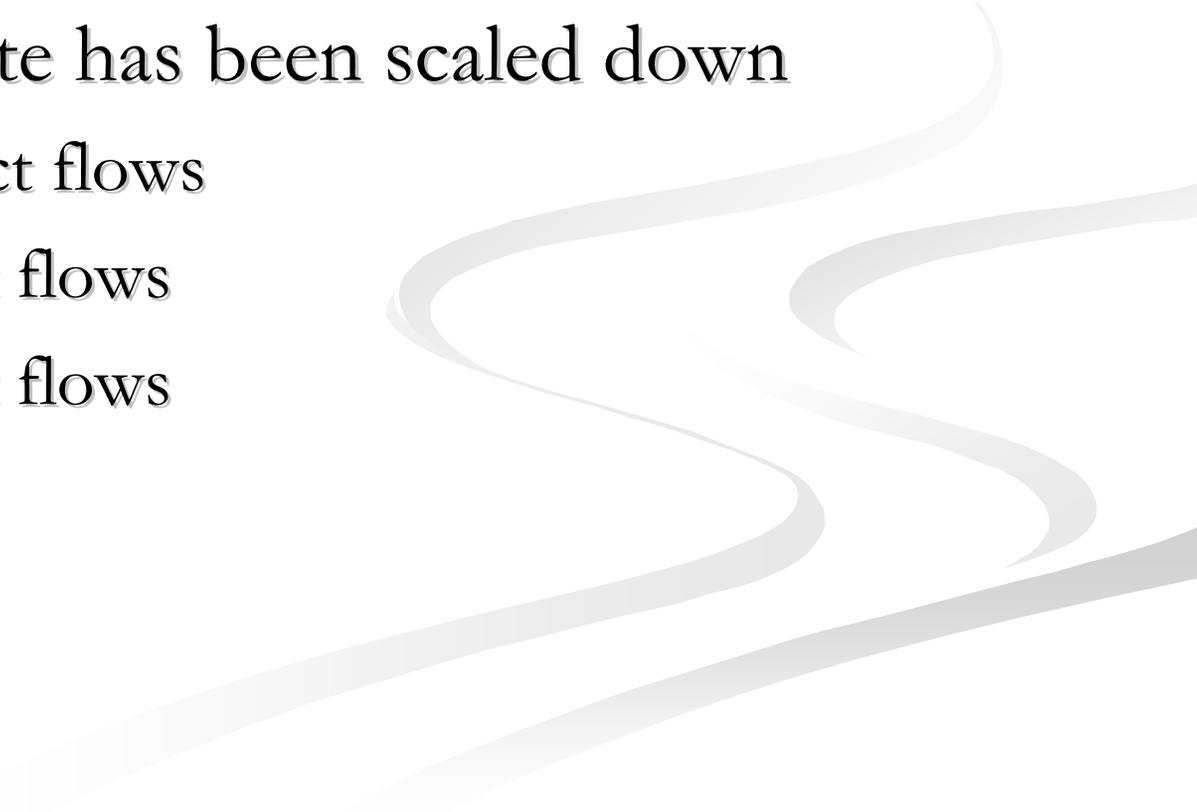


Disposal Area

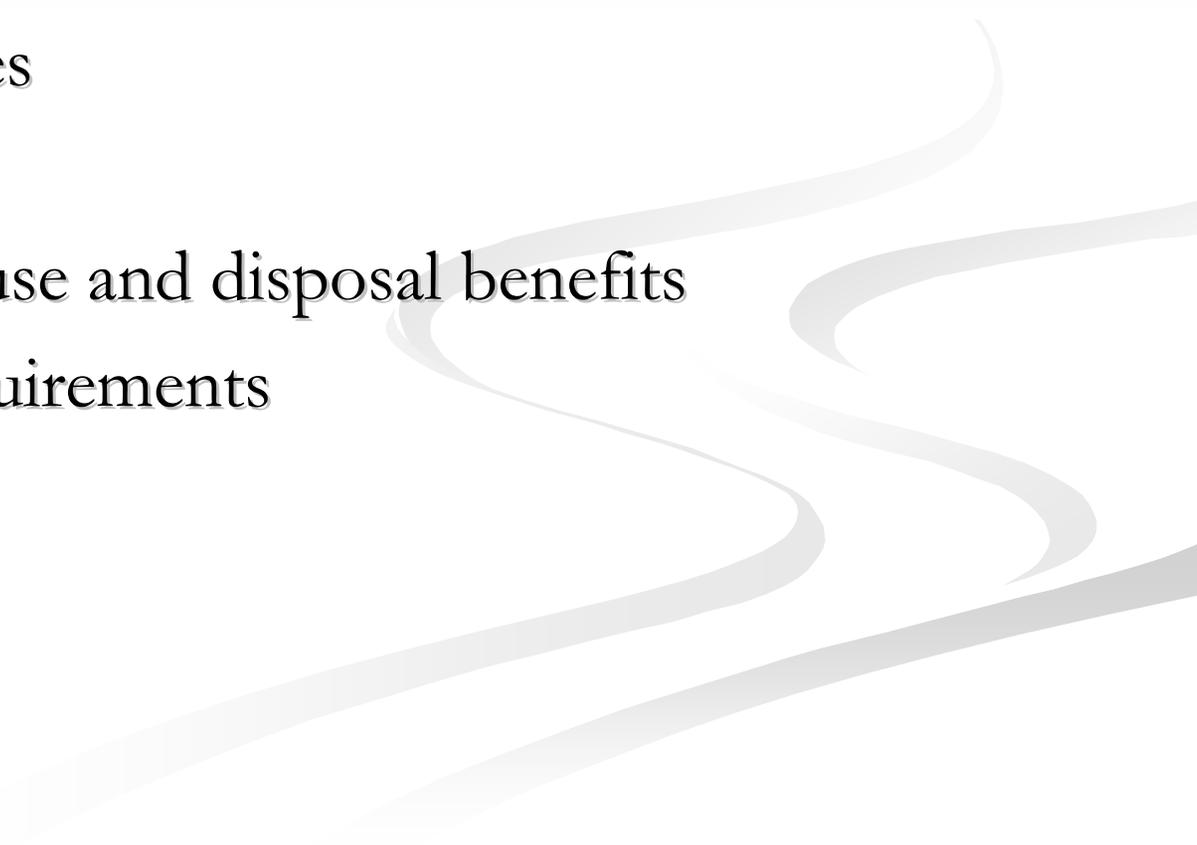




Broderson Site Development History

- 20 years of site study, review, and testing
 - Utilization of site has been scaled down
 - 100% of project flows
 - 67% of project flows
 - 33% of project flows
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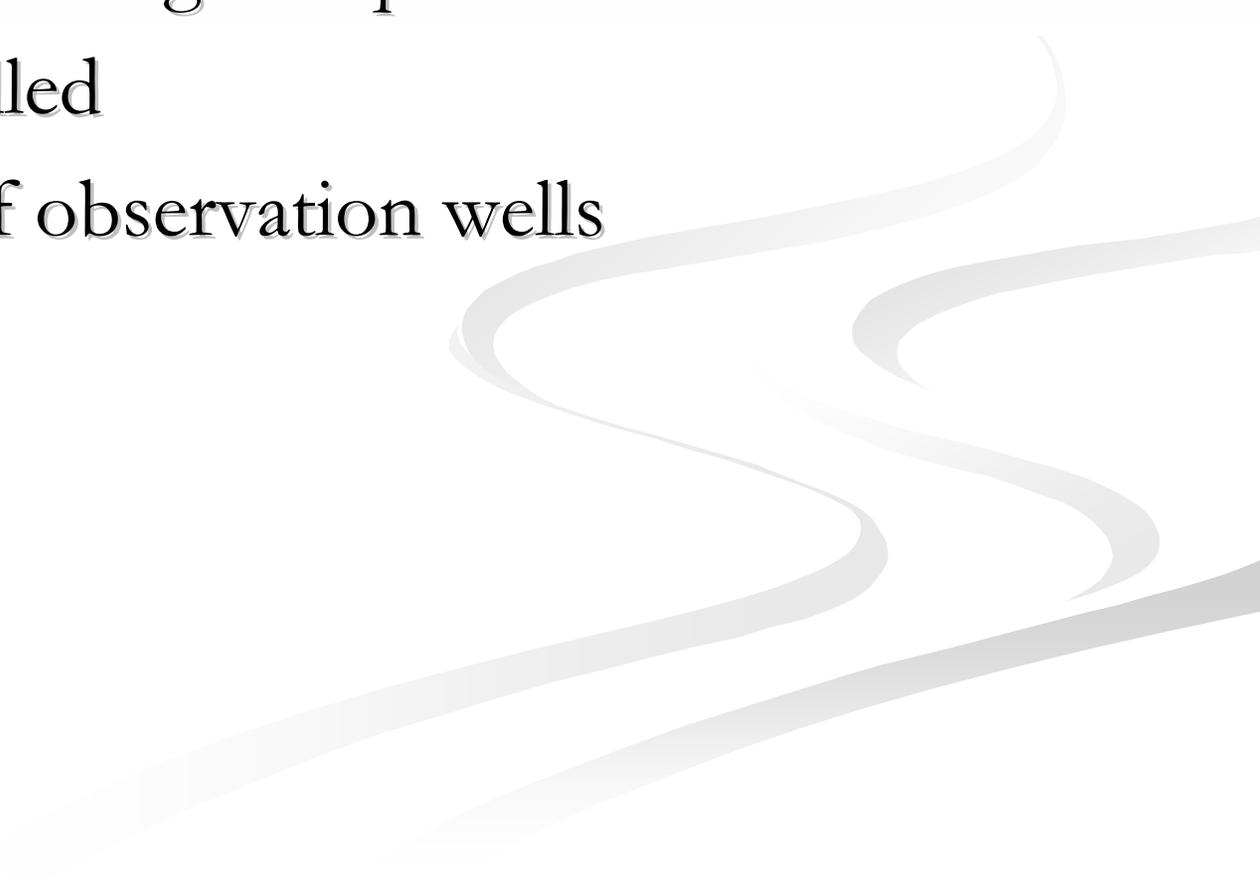
Broderon Site Development History

- Key Issues
 - Infiltration rates
 - Mounding
 - Wastewater reuse and disposal benefits
 - Regulatory requirements
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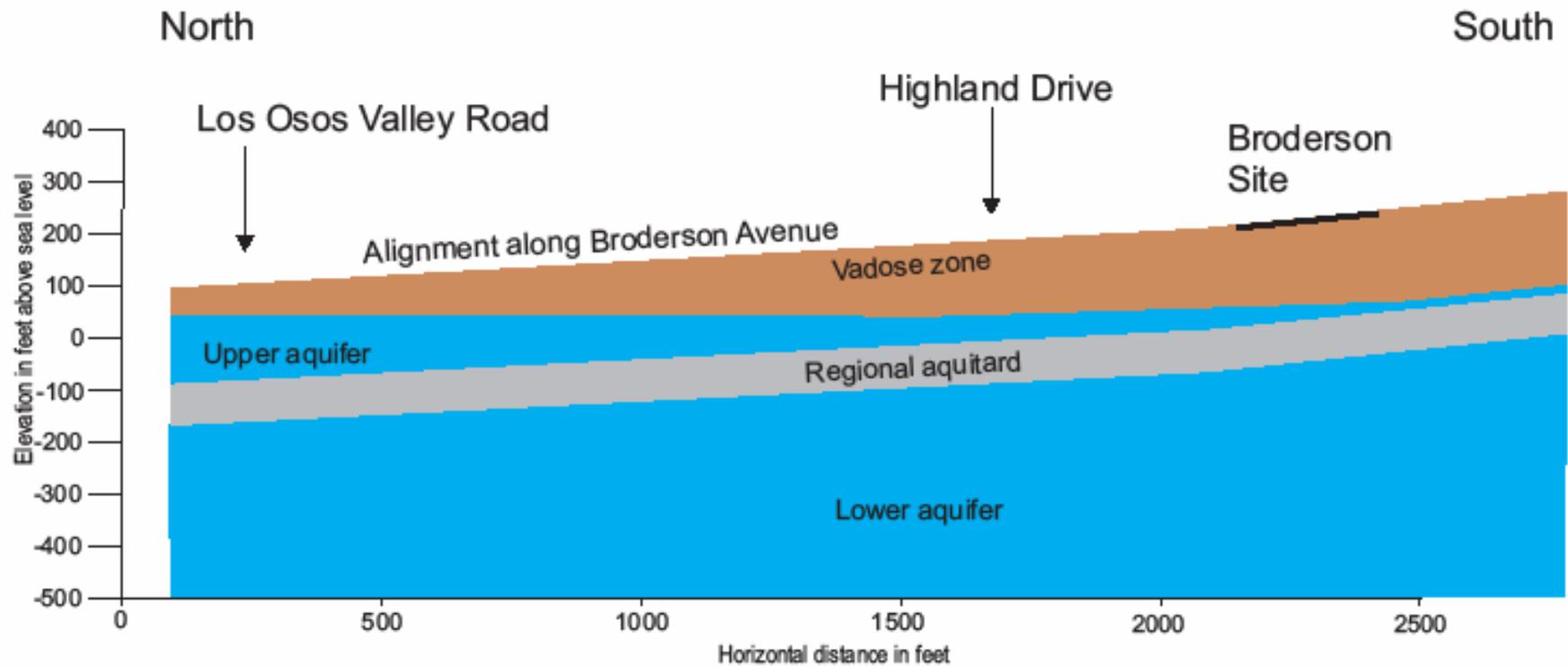
Infiltration Rates

- Prototype testing of percolation trenches to determine soil infiltration capacity
- Conservative design of application rate (1/6 of tested capacity)
- Guidelines for septic system leachfields are not applicable

Mounding

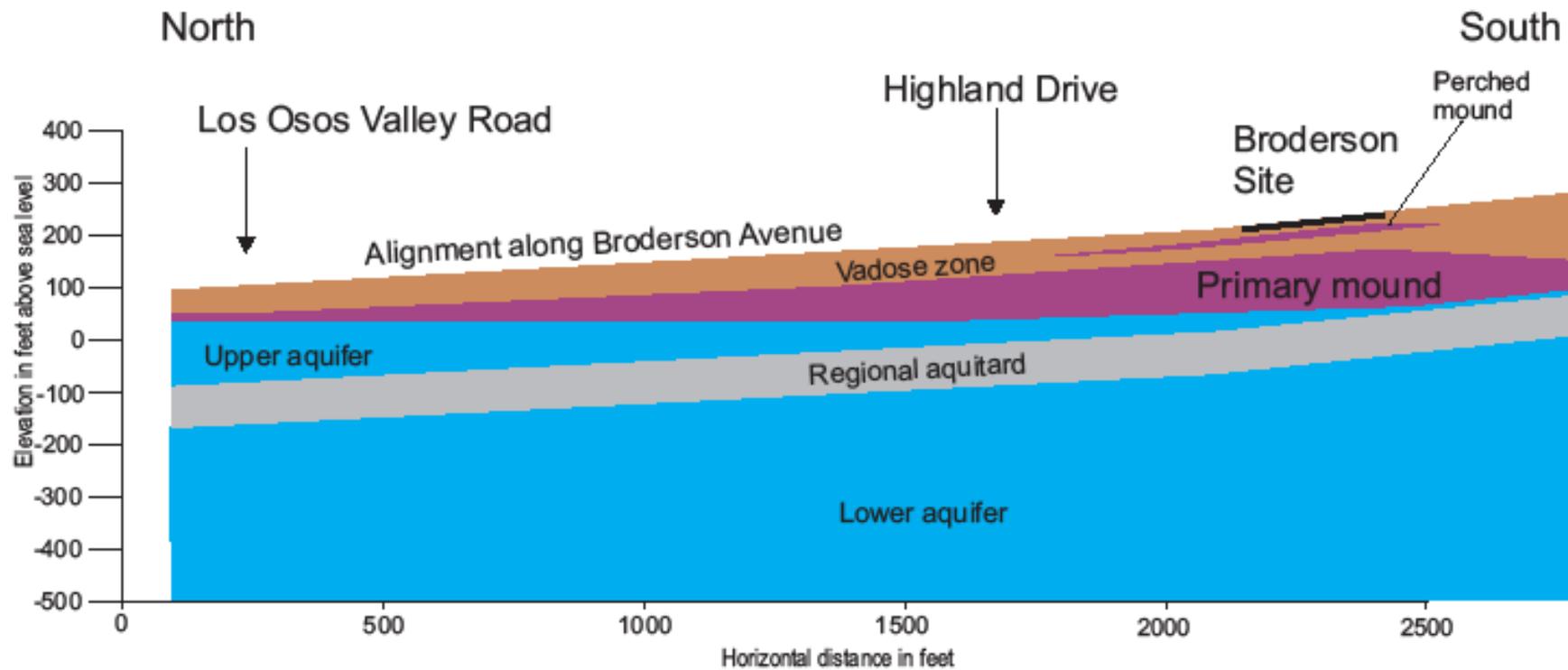
- Study and modeling of aquifers
 - Test wells drilled
 - Monitoring of observation wells
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Current Conditions



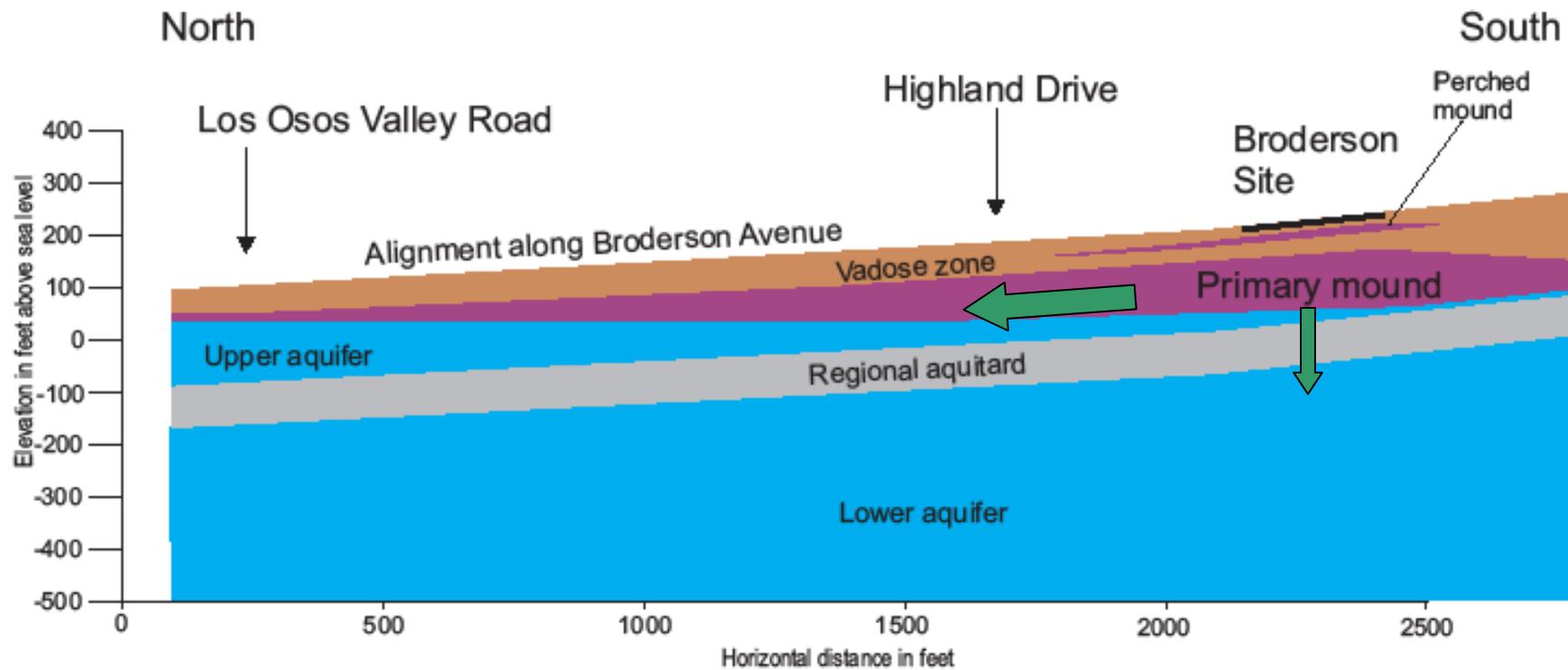
Current Conditions

Project Conditions at 0.4 MGD



Project Conditions
Broderson Site at 400,000 gallons per day

Project Conditions at 0.4 MGD



Project Conditions
Broderson Site at 400,000 gallons per day

Wastewater Reuse and Disposal (Sustainability Benefits)

- Mitigates sea water intrusion in lower aquifer
- Replenishes upper aquifer
- Provides flexible all-weather disposal capacity
- Establishes distribution backbone for future urban reuse (purple pipe) programs

Regulatory Requirements

- Regional Water Board waste discharge requirements
- Department of Public Health groundwater recharge requirements
- State and Federal biological resource agencies
- Broderson has been previously permitted by all applicable agencies

Next Steps

- Final Technical Memos
- Peer Review by NWRI Panel
- Environmental Analysis (Draft EIR—Fall, 2008)
- Groundwater Management Plan with community water purveyors