

Chatfield State Park

January 14, 2025



LIVE LIFE
OUTSIDE

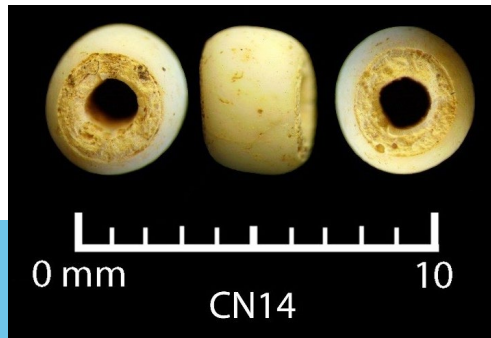
Pre - History





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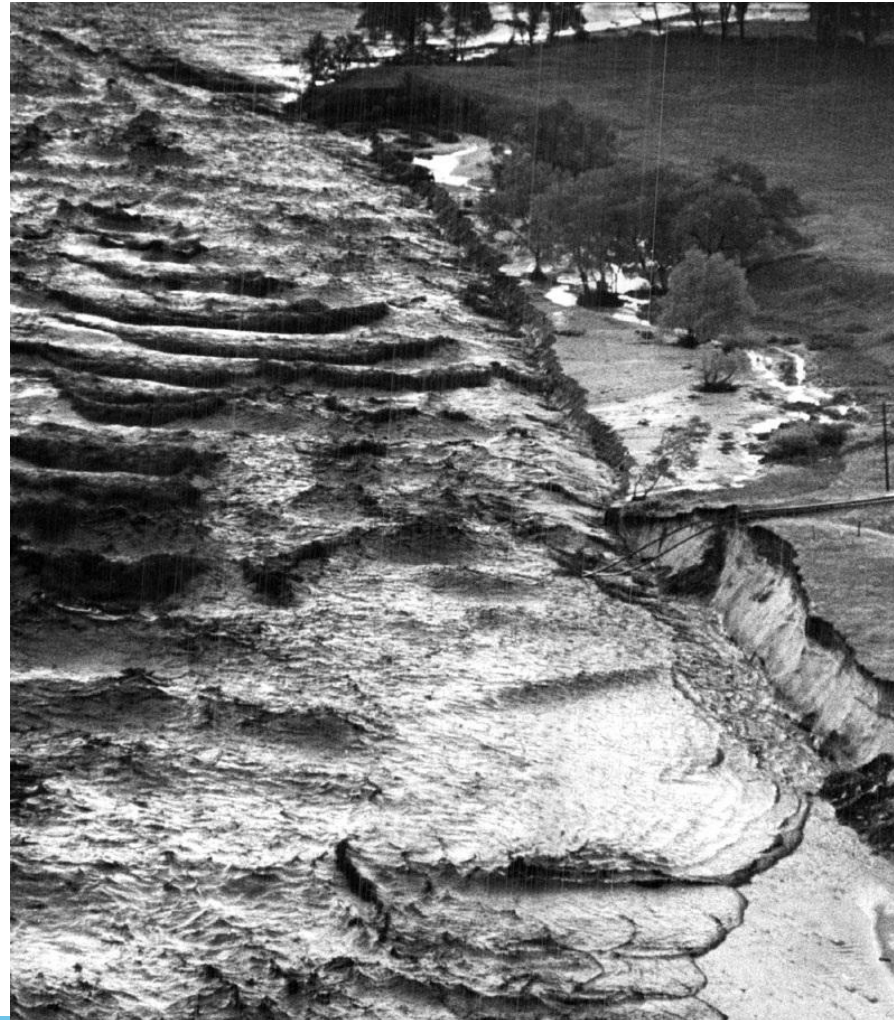
Indigenous People



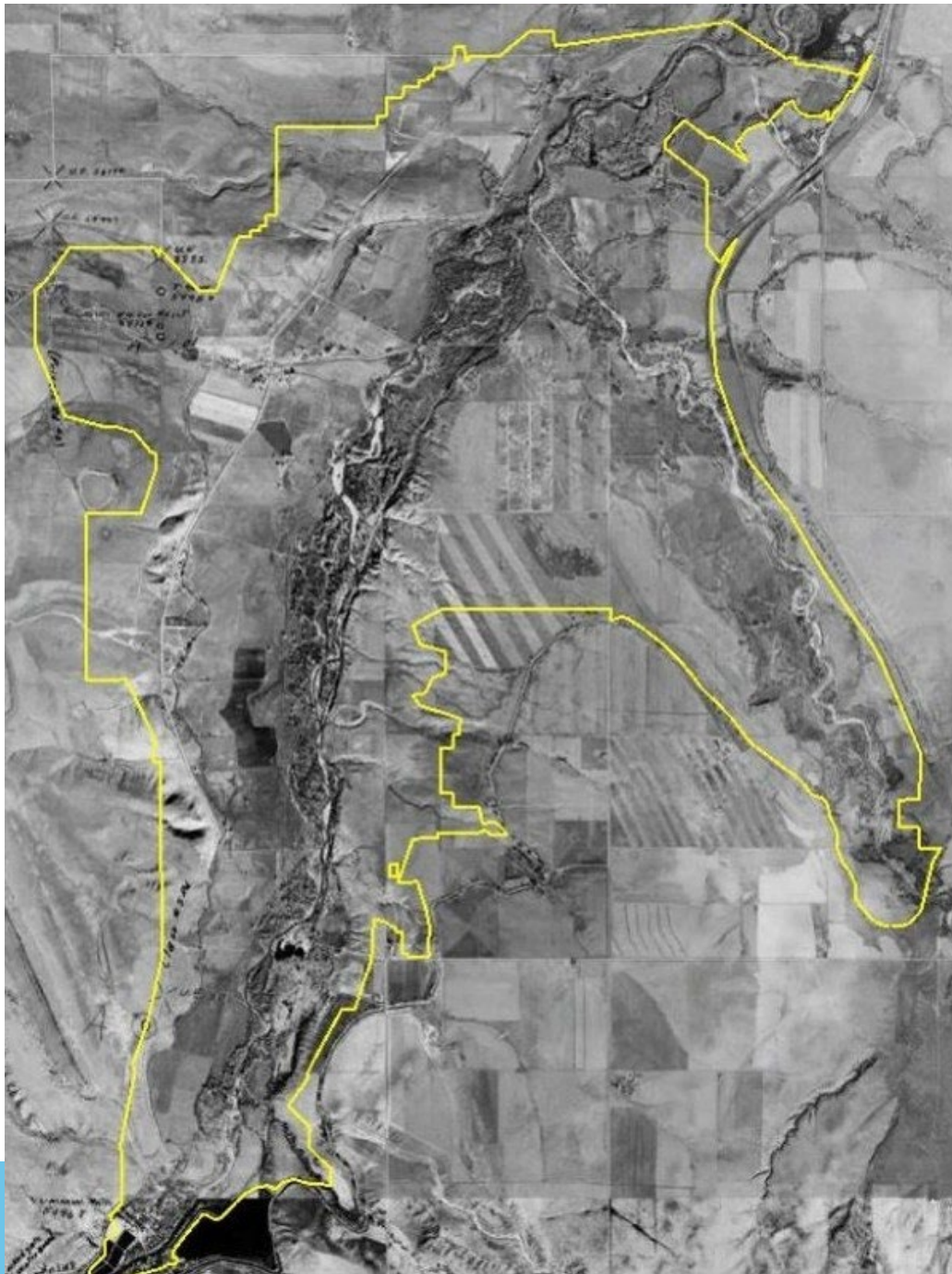
European Settlement



1965 Flood



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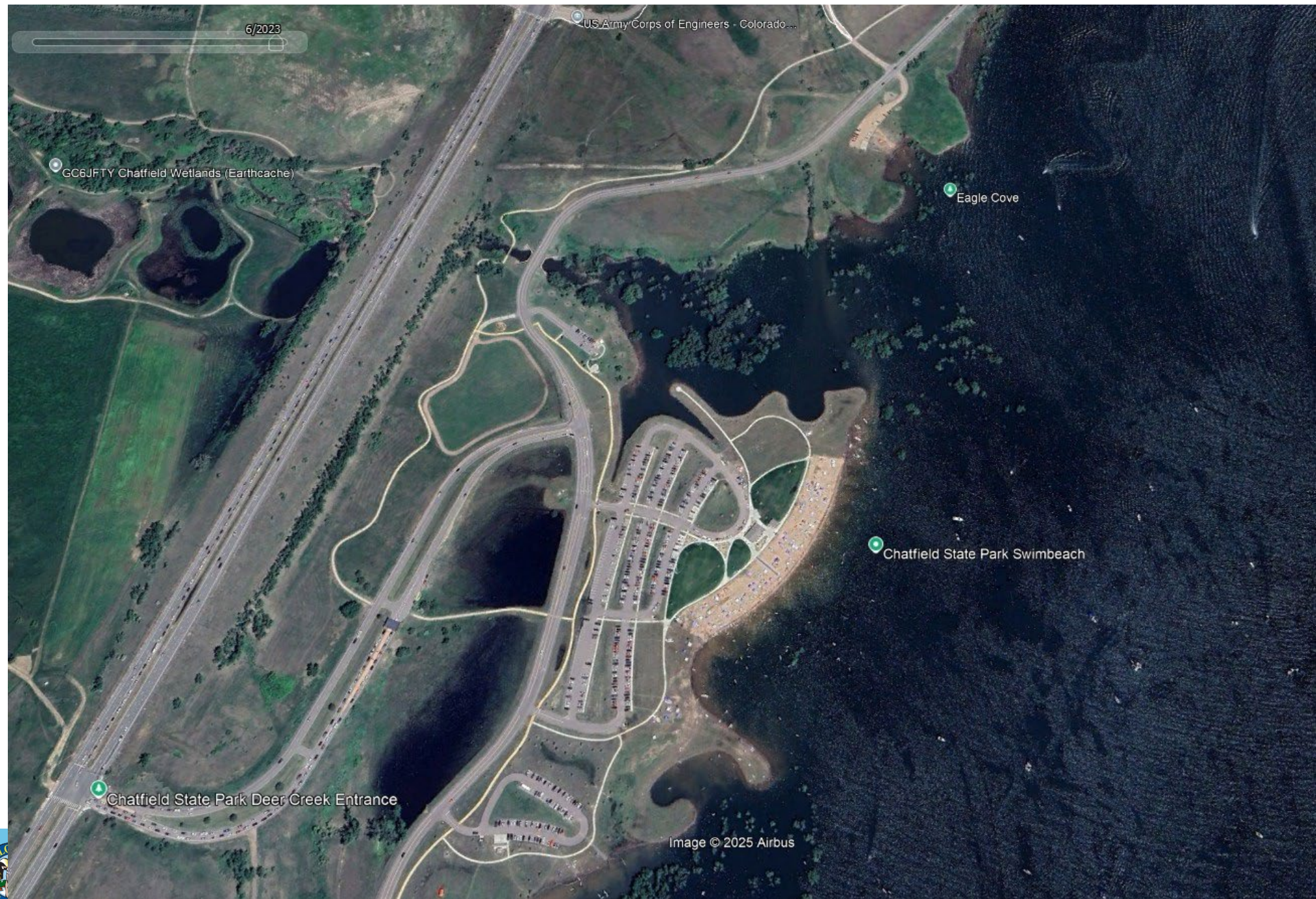
Current

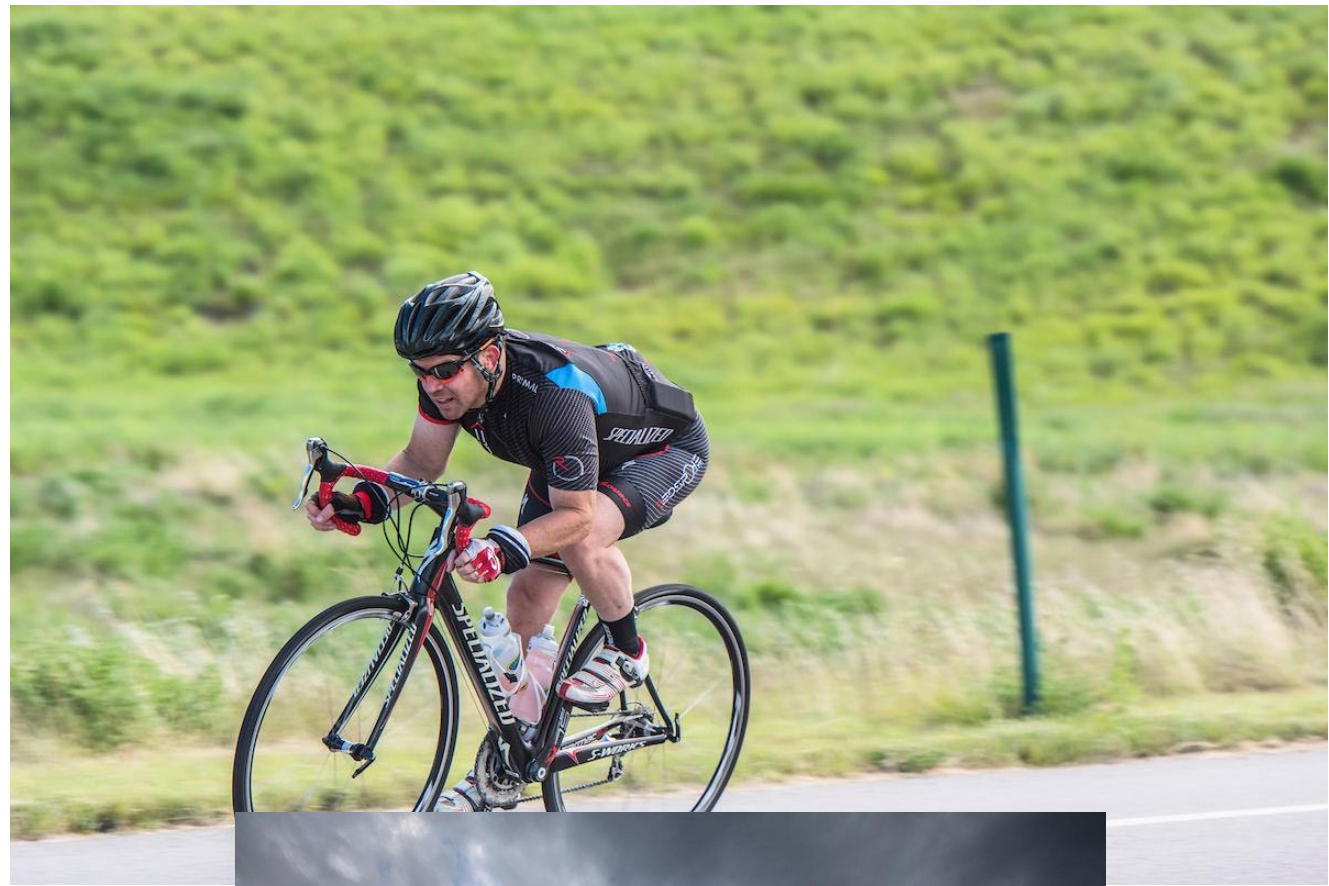


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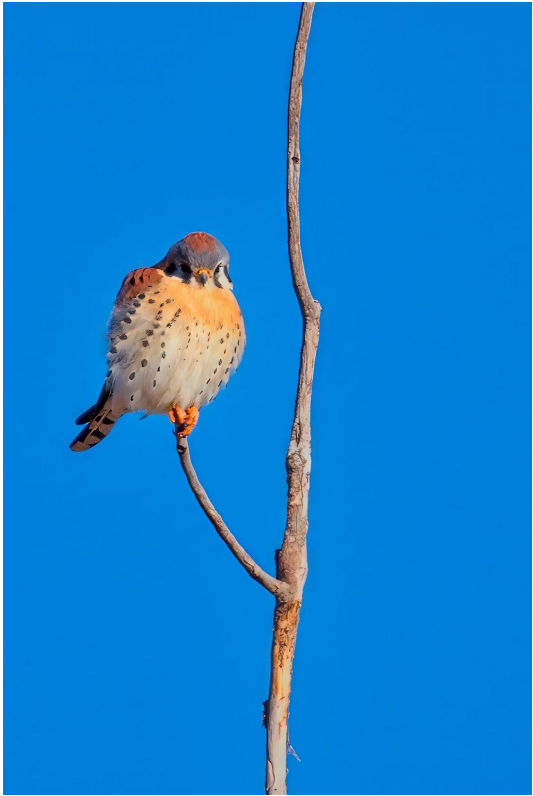
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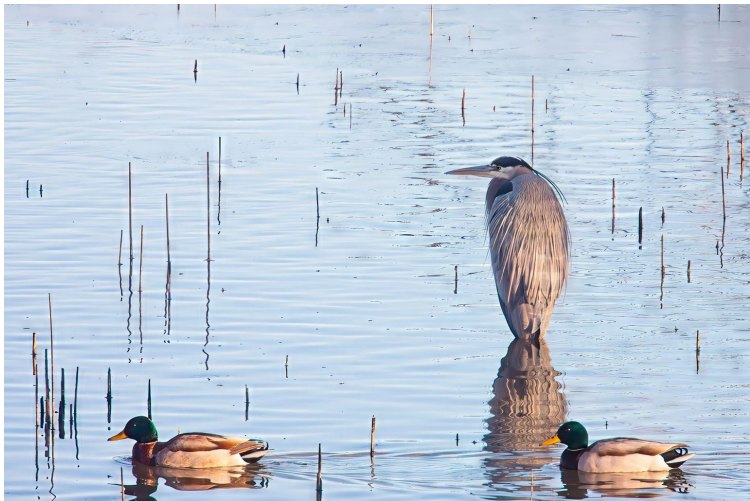
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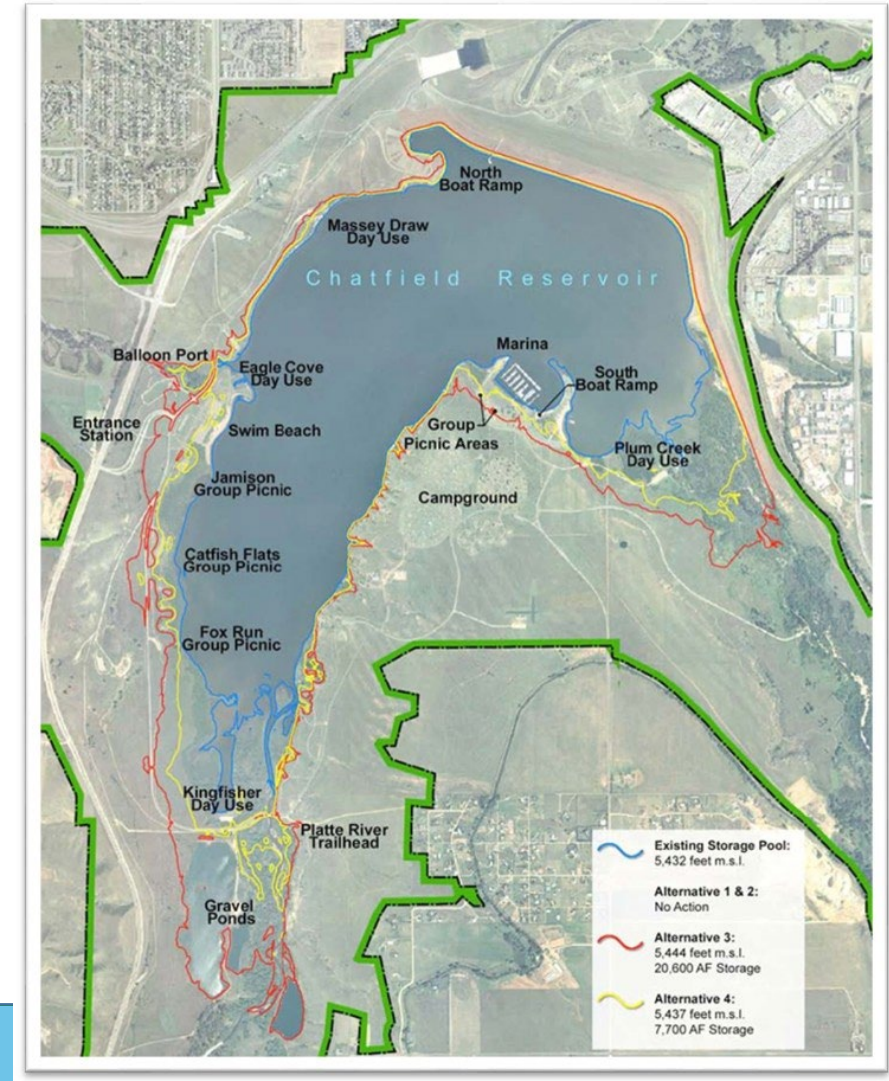
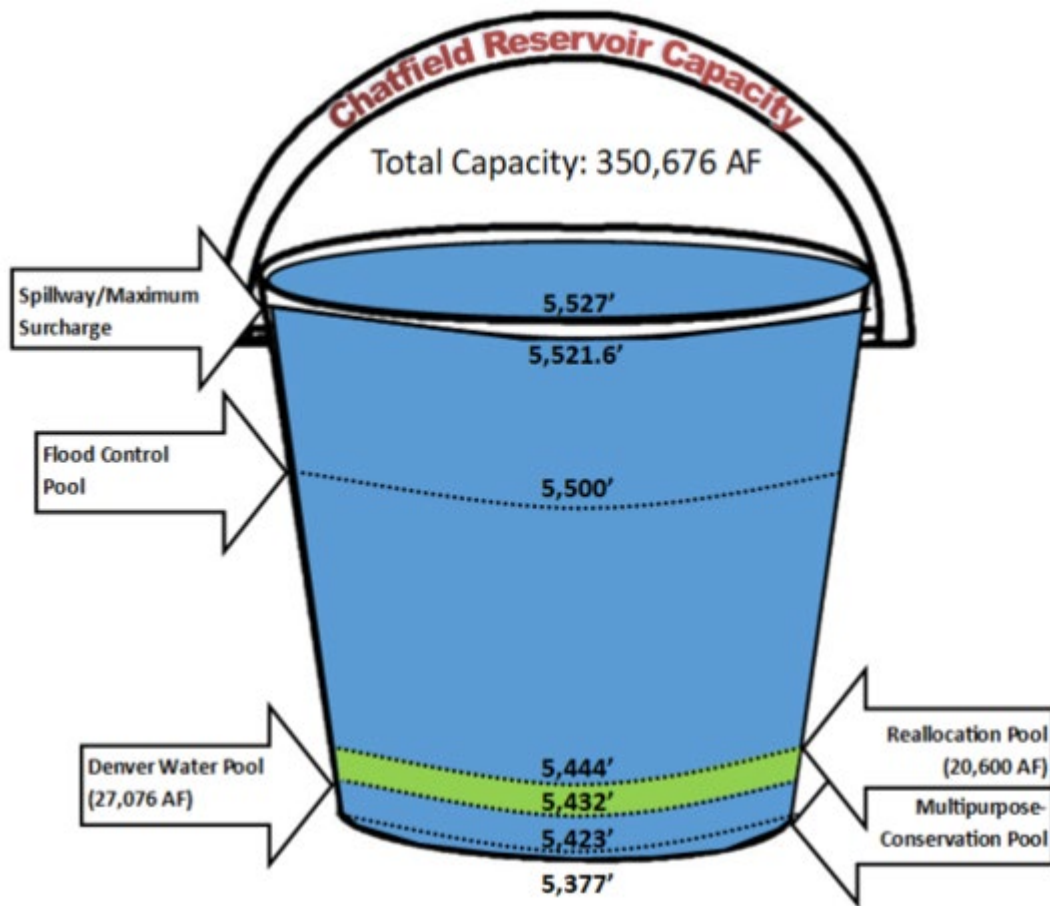
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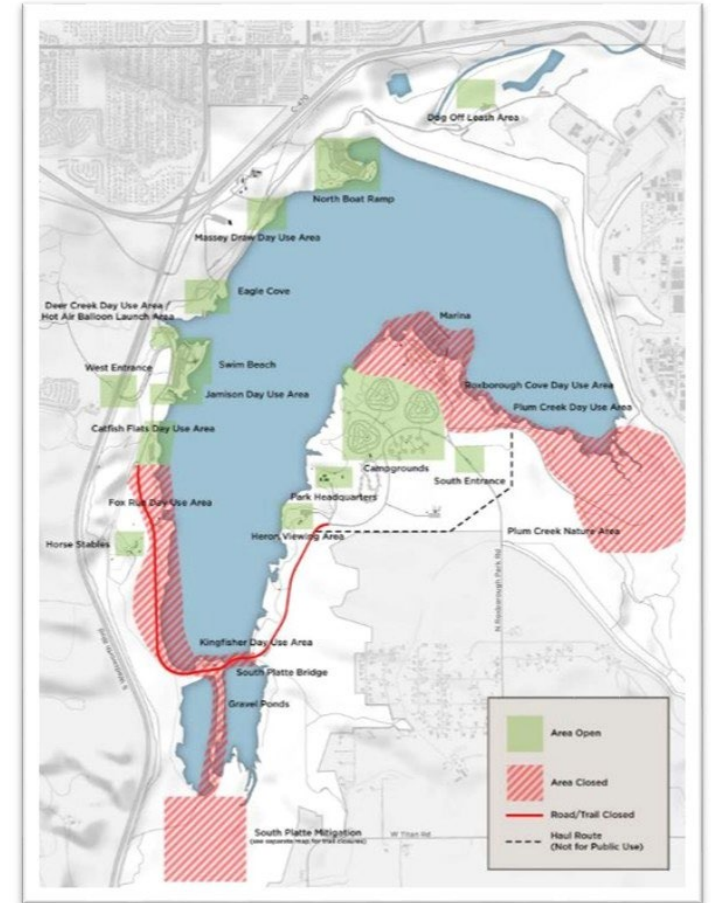
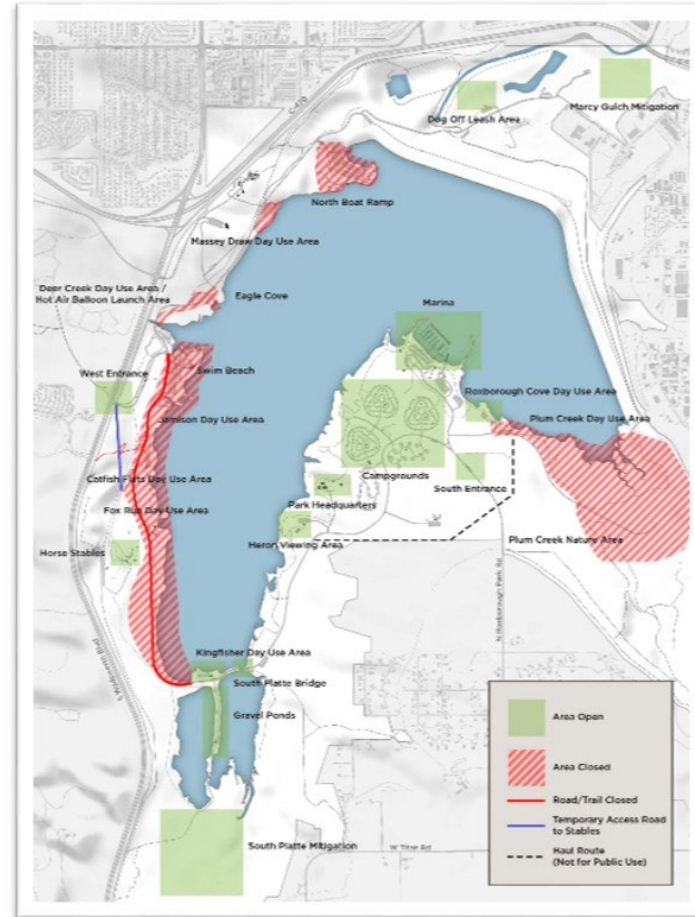
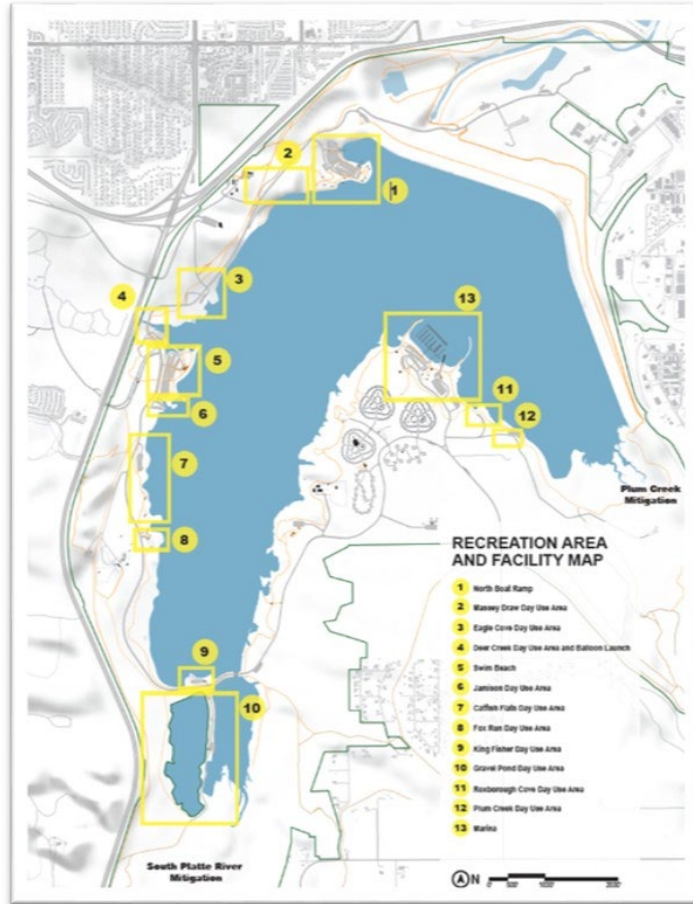
Chatfield Storage Reallocation Project



Project Structure



Recreational Modifications & Environmental Impacts



EM in Plum Creek



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EM in Plum Creek



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EM in Plum Creek



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EM in Plum Creek



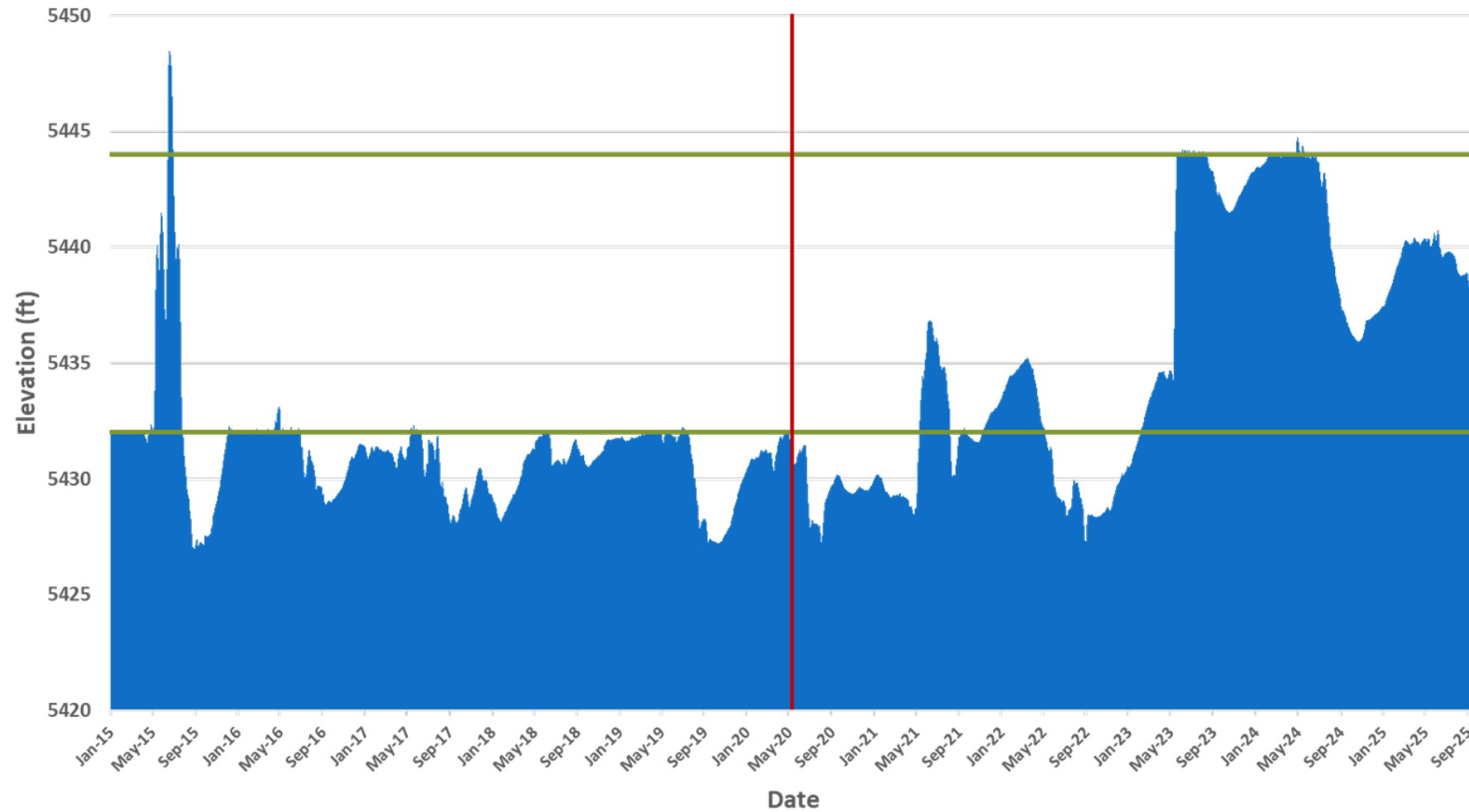
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EM in Plum Creek



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The Fill



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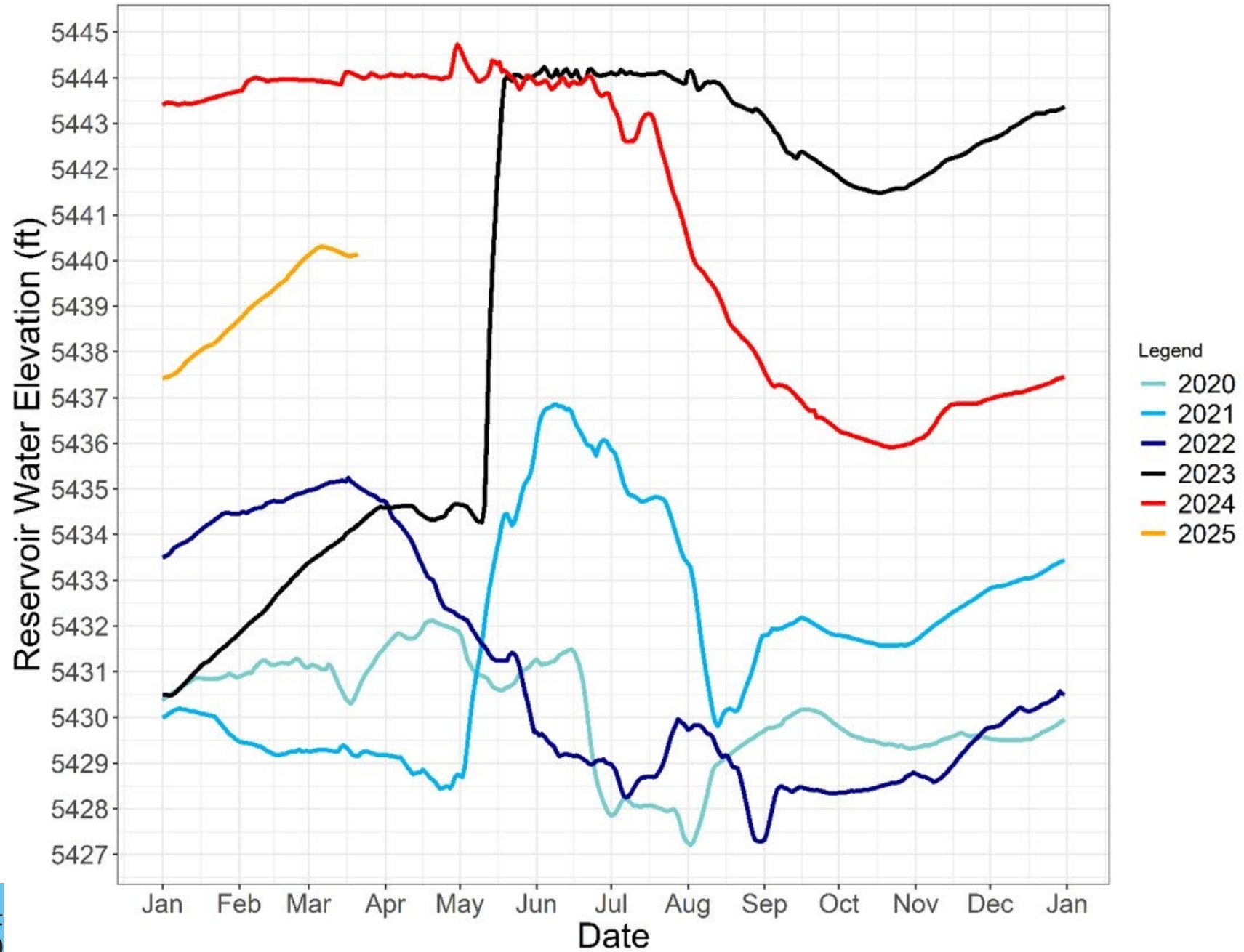


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Chatfield Reservoir





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Environmental Pool

- CPW manages and operates Chatfield Reservoir EP on a daily basis pursuant to terms of the 122.2 Plan:

*“The Project Participants agree to collaborate with the State to create an environmental storage space (Environmental Pool) for the primary purpose of **timed releases to alleviate low flow conditions downstream of Chatfield Reservoir.** Water stored within the Environmental Pool may also be used to **maintain water levels in the reservoir** or for **augmentation purposes at the Chatfield State Fish Unit.** CPW will have control over water stored within the Environmental Pool and will have the authority to make releases as it deems appropriate.”*

- All EP releases will be made for a beneficial use in accordance with the respective Water Court decrees.





Biological and Ecological Benefits from Chatfield Reallocation Environmental Pool Increased Releases Report, Miller Ecological Consultants, 2019

- Eliminate days with zero and near zero flows
- Release water on low flow days in the summer for additional refuge habitat during times of elevated water temperature

The ability to meet these priorities will depend on the volume available in the Environmental Pool.



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CSRP Next Steps - Adaptive Tree Management Plan Objectives

Objective 1. Protect and Promote Safety and Operations

- Remove hazard trees (including stumps and large woody debris) to protect and promote dam, boater, and visitor safety.

Objective 2. Retain Healthy Trees and Shrubs

- Retain healthy trees and shrubs to maximize Preble's and bird residual EFUs within the FZ.

Objective 3. Remove Downed Woody Debris

- Remove Downed Woody Debris from the area below 5,439 ft msl to minimize impacts on water quality except as retained for aquatic and wildlife habitat.

Objective 4. Eliminated

Objective 5. Manage all Noxious Weeds

- Within the FZ, eradicate all "A List" noxious weeds plus salt cedar and control all "B List" noxious weeds on the State's Noxious Weed Species lists.

Objective 6. Prevent CSRP Water Quality Standards Exceedances

- Internal nutrient loading from newly inundated vegetation and new anoxic sediments attributed to reallocation pool level increases will not cause water quality standards for chlorophyll and total phosphorus or the total phosphorus TMAL to be exceeded.
- Ensure that expansion of hypoxic conditions from newly inundated vegetation, woody debris, and mulch will not cause other water quality standards (i.e., other than chlorophyll and total phosphorus) to be exceeded.



CSRP Next Steps - Water Quality

Phase I: Initial Model Development (Completed in 2018)

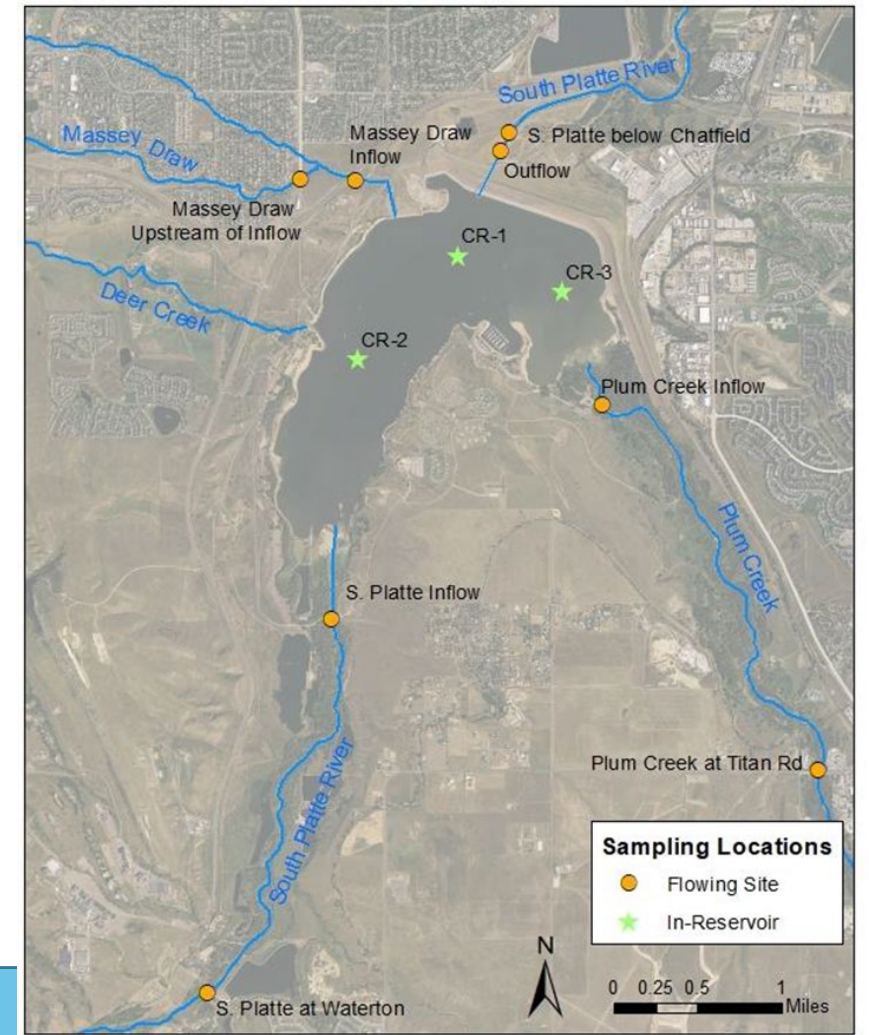
- Develop and Calibrate Model (2013 - 2016)

Phase II: Model Update Prior to Storage (Completed in 2020)

- Extend Model to Include 2017 - 2019
- Update Model Calibration for Entire 2013 - 2019 Period

Phase III: Model Use Post-Storage (In Progress)

- Extend Model on an Annual Basis
- 2024 Model Summary and Next Steps:
 - Extended Model Continues to Perform Well
 - Model Scenario Comparisons Show the Reallocation Project Did Not Significantly Impact Water Quality in 2024 (also supported by attainment of WQ standards)
 - Continue Annual Phase II Model Updates





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