



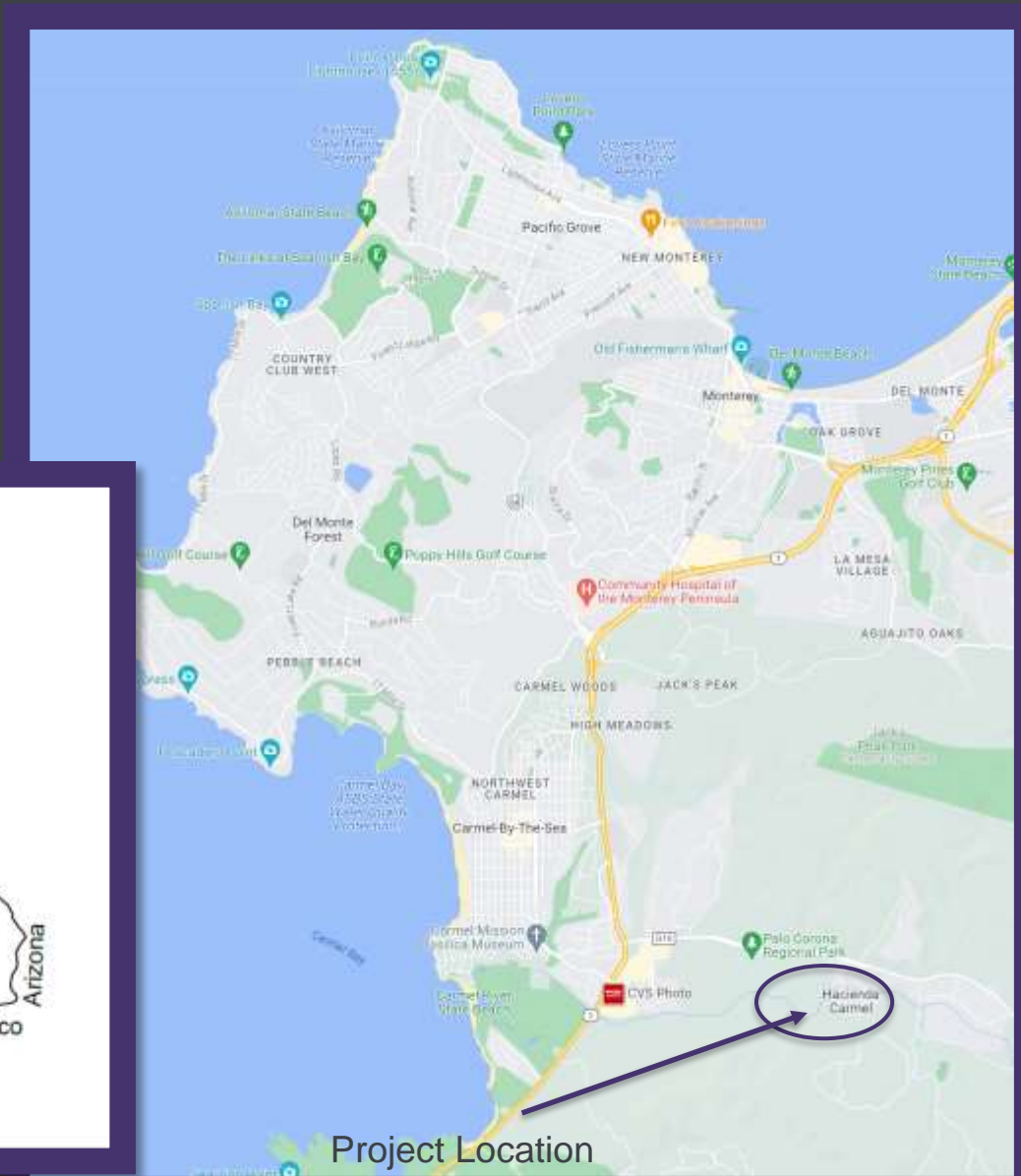
REWILDING A FLOODPLAIN CARMEL, CALIFORNIA

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PROJECT LOCATION

Rancho Cañada Regional Park

Active Stakeholders





**Ancestral Home of the
*Ohlone-Rumsen People***

**Mapped as *Willow
Marshland* by Spanish
in 1700s**

***Agriculture* and
Recreation Followed**

EXISTING SITE CONDITION



EXISTING SITE CONDITION



PROJECT GOALS



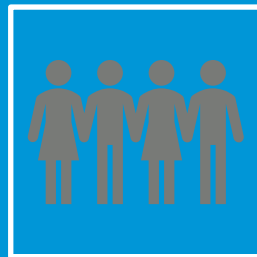
Identify **Restoration Approach** with TAC



Restore **Floodplain Processes**



No Increase in **Flood Risk** to Community



Community **Outreach**



DESIGN CONCEPT

- Habitat Enhancement and Establishment
- Variety of Floodplain Surfaces
- Let the River “Heal Itself”



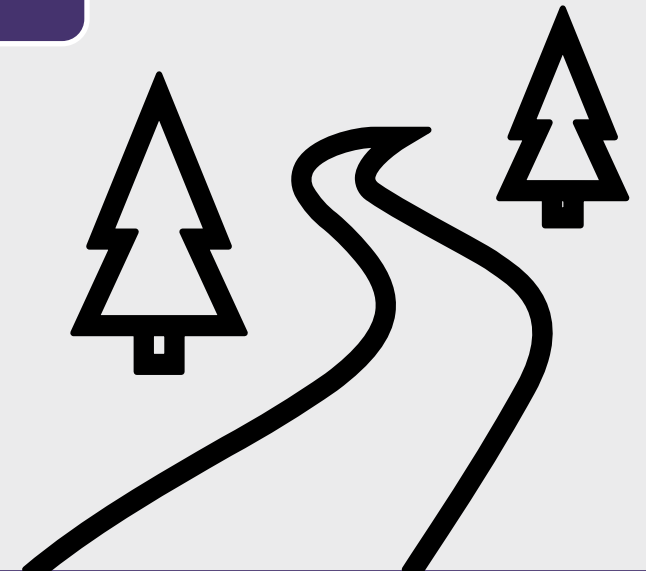
DESIGN PROCESS

Active Channel

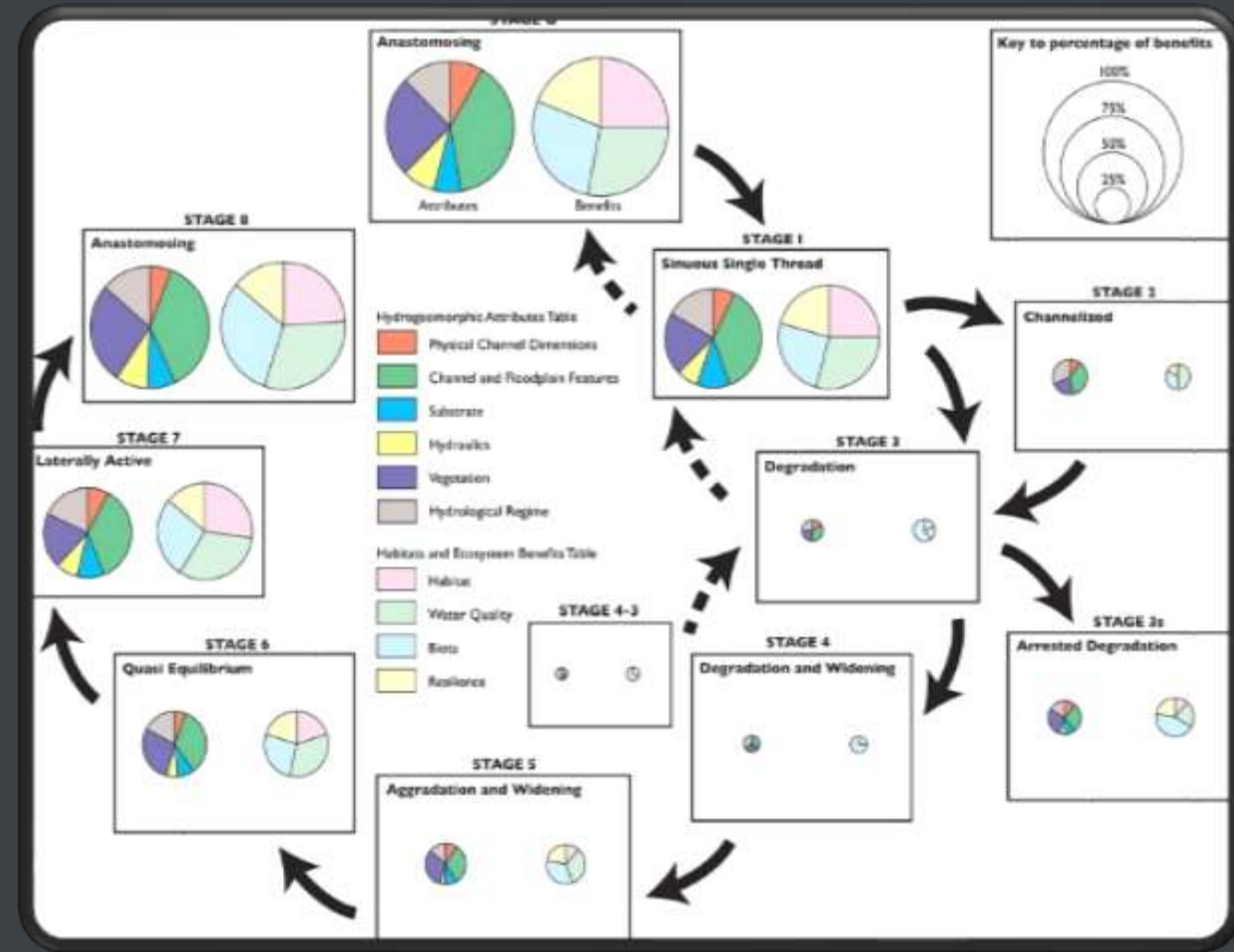
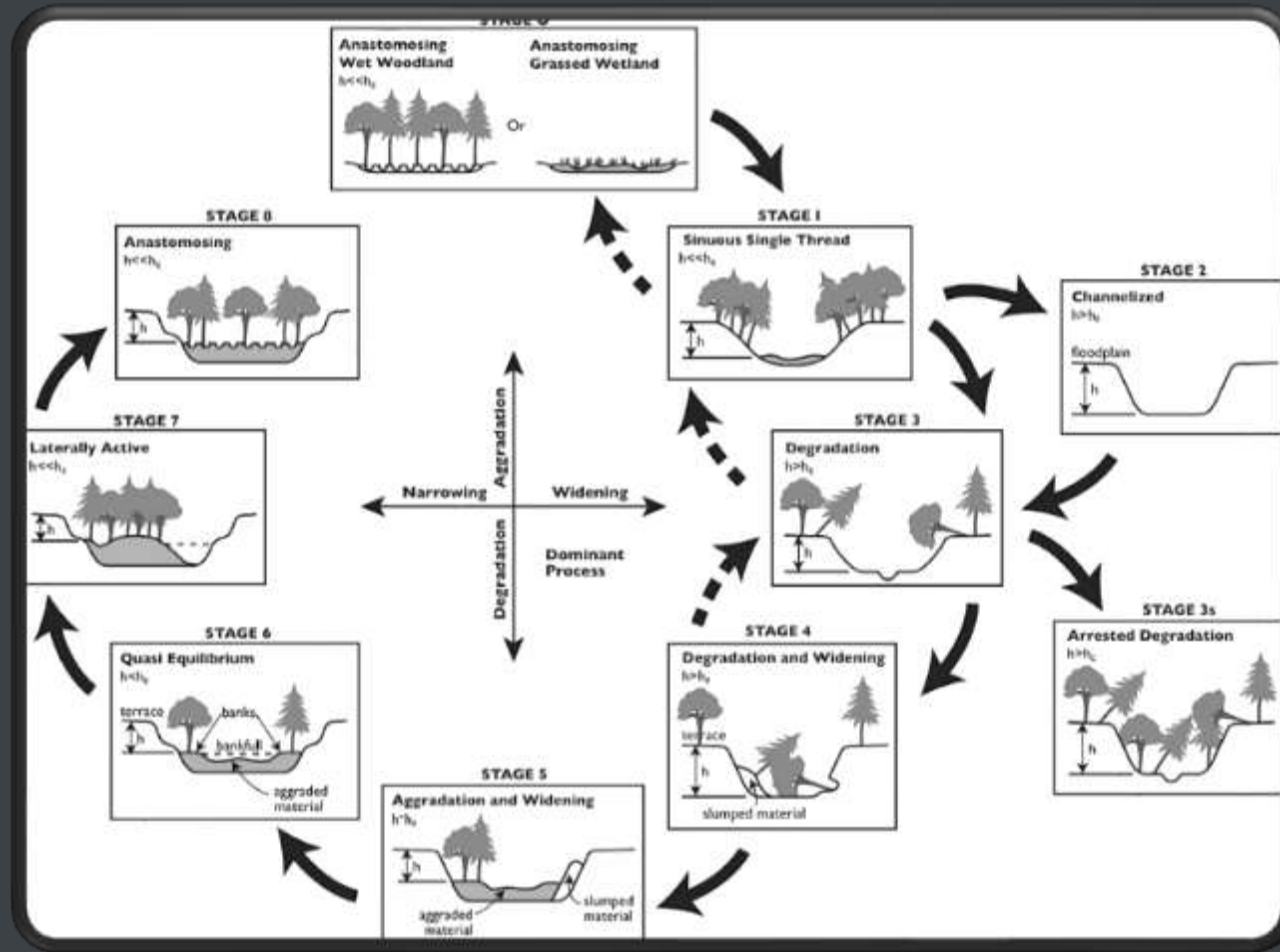
- Set Infrastructure Back

Stage 8 Stream Design

- Channel will aggrade and re-form over time
- Create new channel in high flow event
 - May form single-threaded channel
- Channel migration zone to allow physical process
- Stage 8 instead of Stage 0
 - Cannot increase flood elevation



STREAM EVOLUTION MODEL

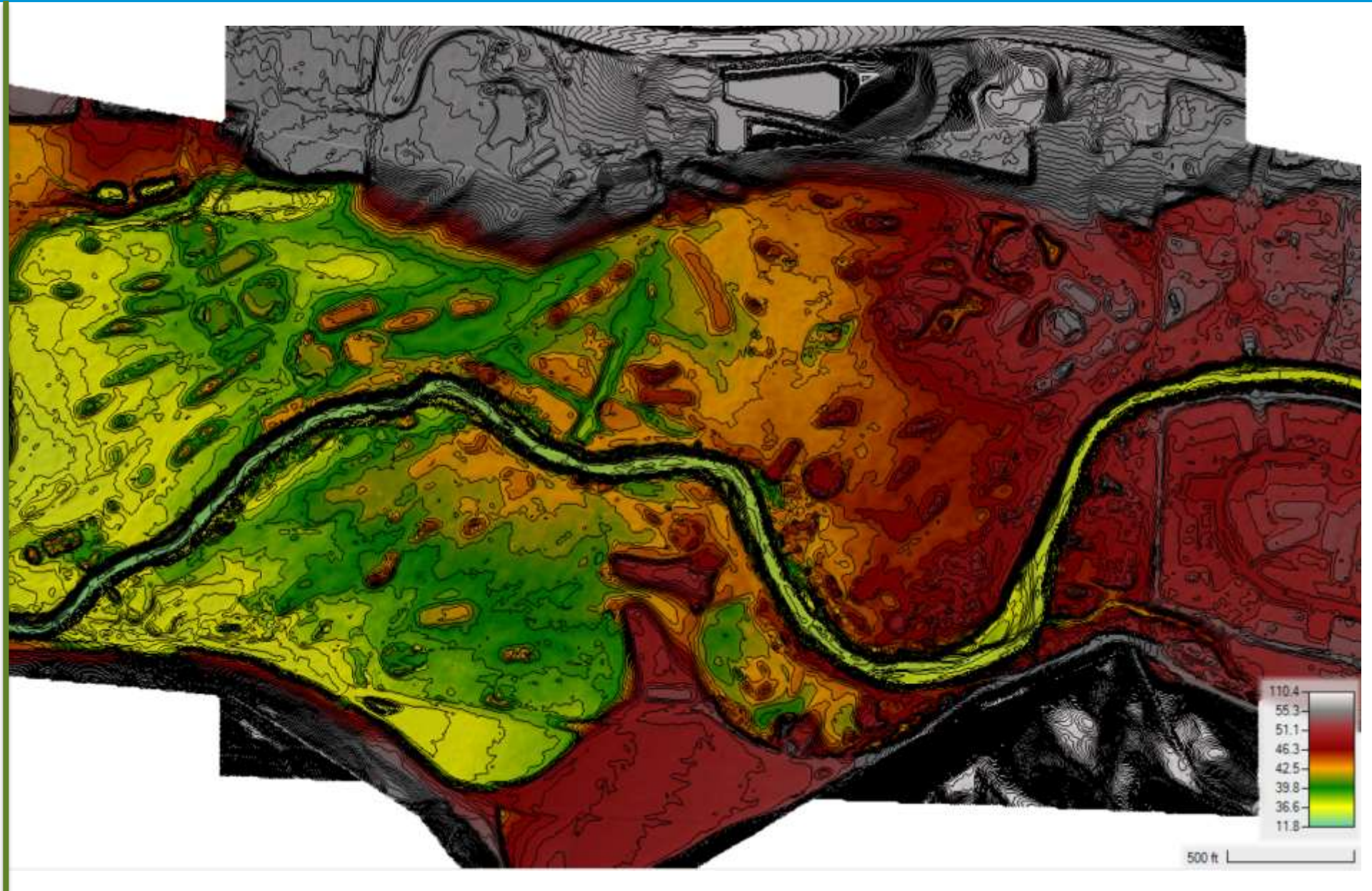


Stream Evolution Model from Cluer and Thorne (2013)

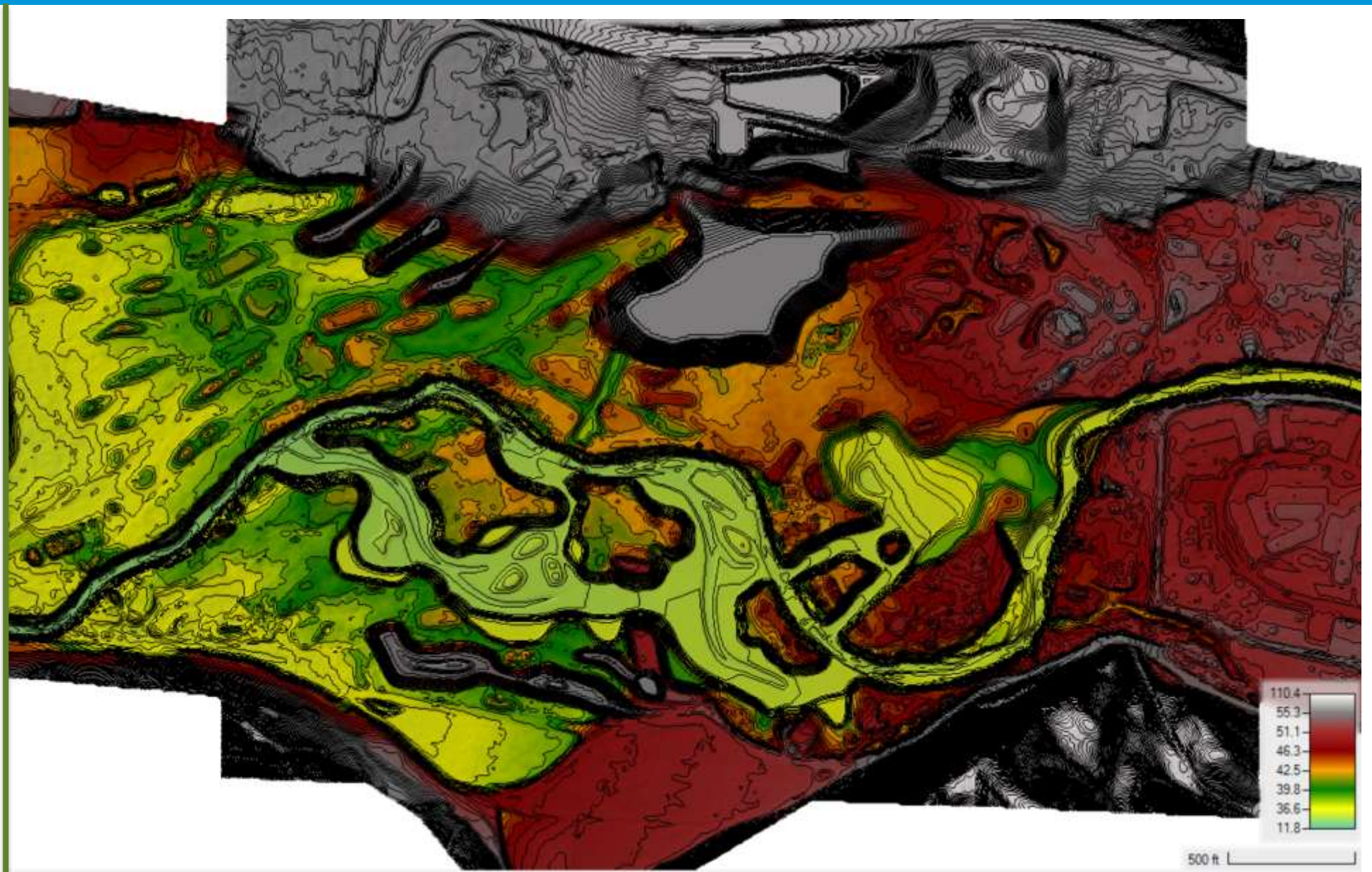
DESIGN LAYOUT



EXISTING CONDITION MODELING AND CALIBRATION



PROPOSED CONDITION MODELING



EXISTING CONDITION - VELOCITY



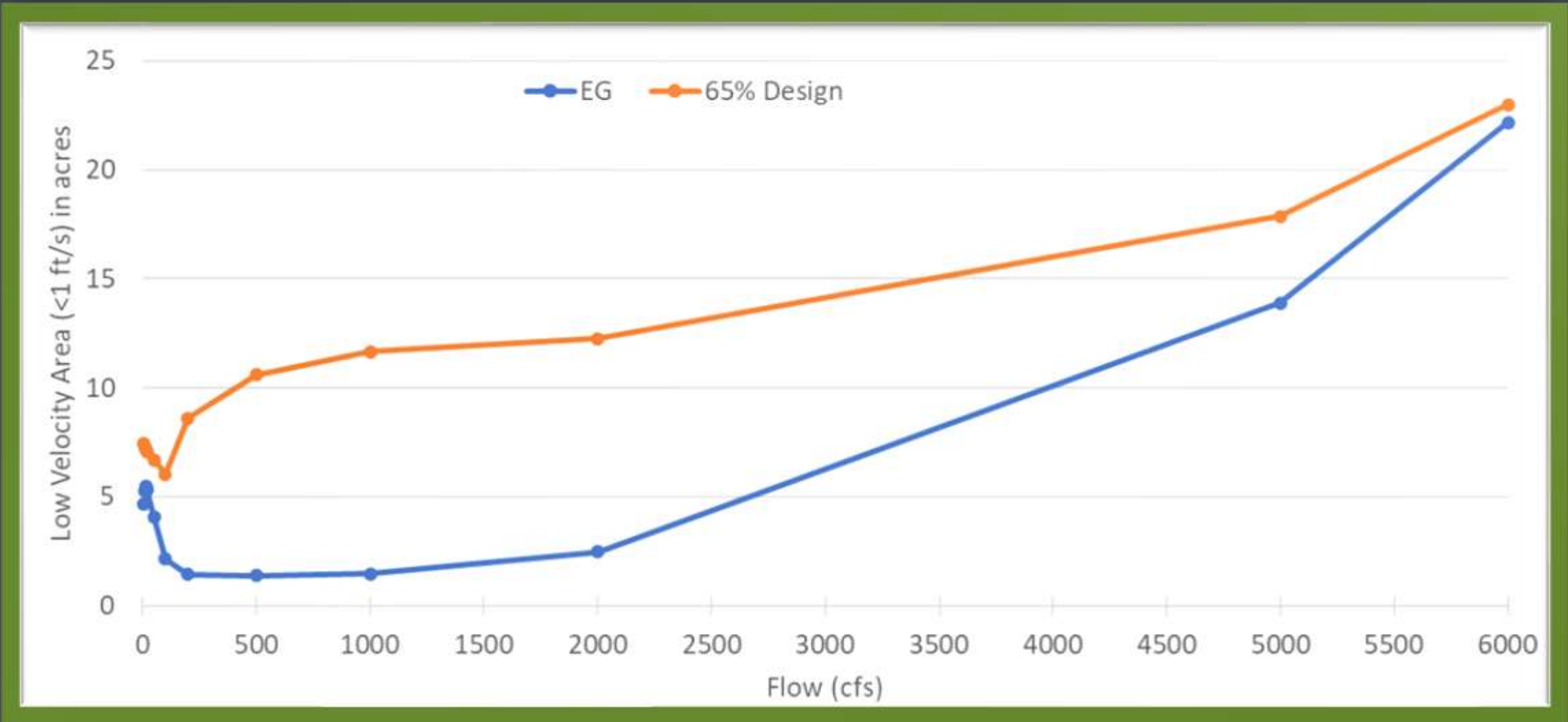
PROPOSED CONDITION - VELOCITY



200 CFS (WINTER MEAN)



LOW VELOCITY HABITAT AREA



KEY TAKEAWAY



**Process-based
Restoration**



**Immediate and
Dramatic Habitat
Gains**



Next Steps



THANK YOU.