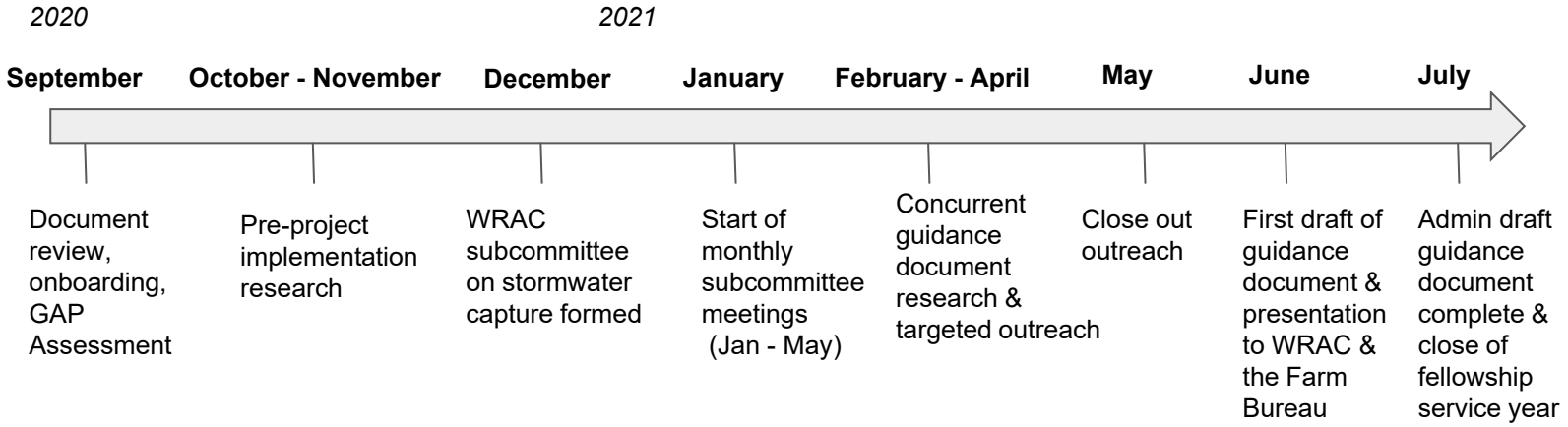
Stormwater Capture in SLO County

Overview

- CivicSpark program and project objective
- Subcommittee discussions
- Project methods, scales and considerations
- Outreach findings
- Draft potential recommendations

CivicSpark

- 11-month service year
- Increase local government capacity



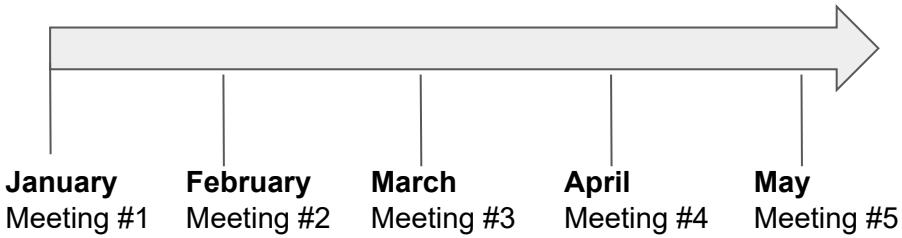
Stormwater Capture for Recharge in SLO County

- Identify and analyze:
  - Technical
  - Financial
  - Policy-level
  - Permitting and regulations
  - Legal issues

- Research and outreach → guidance document

Subcommittee Discussions

- Objective: *to discuss, support and provide guidance on various topics and activity to further expand the understanding of stormwater capture for groundwater recharge opportunities in the County.*
- Topics of interest:
  - Partnership possibilities
  - Costs, funds and incentives
  - Legal issues
  - Permitting
- Outreach direction and guidance document content

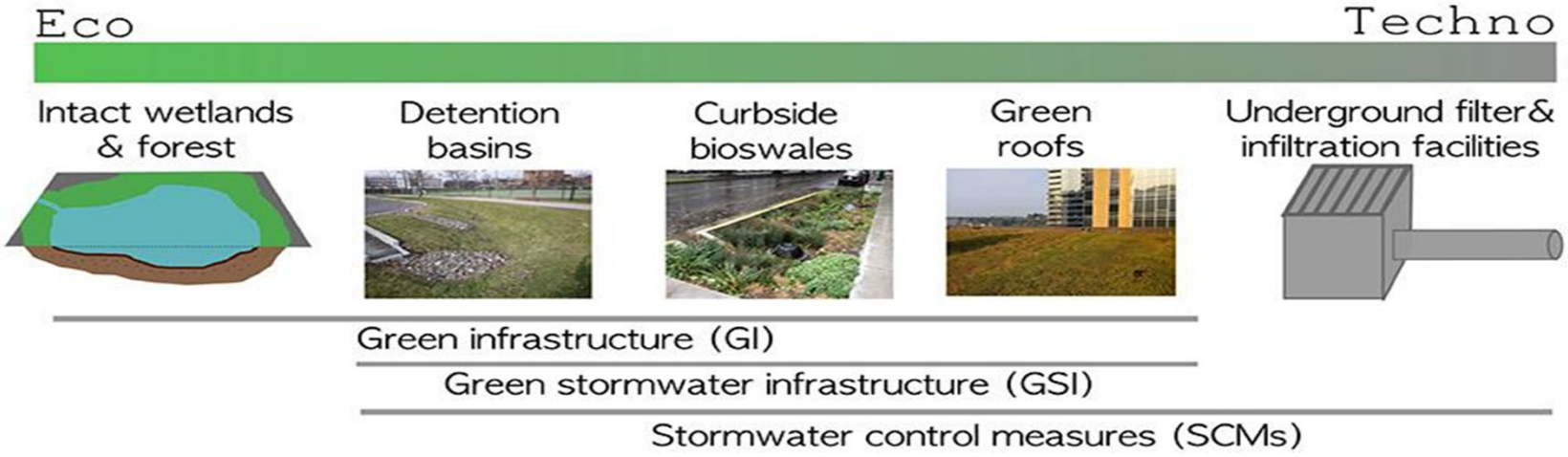


Stormwater capture methods and scales

- Urban and rural
- Regional, large-scale, watershed-wide
- On-farm
- Best Management Practices (BMPs)
- In-stream flow enhancement

Urban and Rural Stormwater Capture

- Stormwater elimination → stormwater capture and recharge
  - Urban and residential: “gray” and “green” infrastructure
  - Rural/ undeveloped and agricultural lands

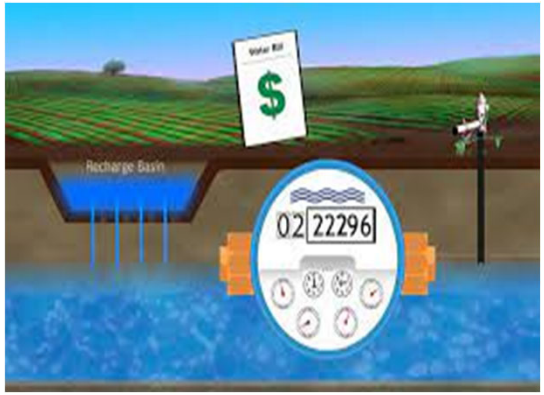


Regional, Large-scale, Watershed-wide

- Considerations:
  - Land availability
  - Permitting
  - Value of land
  - Infrastructure
- Methods:
  - Reservoirs/dams
  - Floodplain/wetland restoration
  - Dedicated spreading grounds
- Case studies:
  - San Antonio Creek spreading grounds
  - Huer Huero Feasibility Study

On-farm Recharge

- Methods:
  - Infiltration recharge basins
  - Flood-Managed Aquifer Recharge (MAR)
- Considerations:
  - Site suitability
  - Multi-purpose land
- Case studies:
  - McMullin Area GMA - Terranova Ranch MAR
  - Santa Rosa Creek recharge basin
- Incentives:
  - Rebate programs
    - Pajaro Valley Water Management Agency



Best Management Practices (BMPs)

- Low Impact Development
  - Water quality
- Regenerative agriculture
  - Carbon farming practices
  - Healthy Soils Program

Instream Flow Enhancement

- Recharge and environmental benefits
- Groundwater dependent ecosystems
- Case studies:
  - Beaver analogues
  - Pine Gulch

Multiple Benefits

- Climate adaptation
- Habitat improvement
- Flood control
- Water quality
- Water quantity

Identified Obstacles to Project Implementation

- Regulatory restraints
- The permitting process
- Uncertainty to crop impacts
- Water availability and suitable recharge sites
- Identification of beneficiaries
- Funding, incentives and fair compensation
- Legal uncertainties
- Water quality implications
- Environmental impacts

Outreach

- Individuals from the community representing a broad range of interests, including environmental, agricultural and economic, etc.
- Subject-matter experts including representatives from...

Areas of Further Exploration for Stormwater Capture

- Feasibility for small-scale pilot projects
  - Multi-purpose agricultural or undeveloped land
- Promote increased regenerative agriculture BMPs
  - Development of land-use based program (e.g., RCD)
  - Incorporation of the keyline plow into carbon farming practices
- Advancing implementation feasibility understanding
  - Hydrology studies for inflow instream water availability
  - Predictions for shifting climate conditions
  - Cost benefit analyses of stormwater capture
- Alternatives analyses
- Programmatic permits for stormwater capture
- Continued discussion in the WRAC
- Future stakeholder outreach including workshops

Thank you!

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