



Functioning Floodplain Initiative

for Improved Flood Resiliency,
Restored Water Quality and
Enhanced Habitat
in Vermont USA

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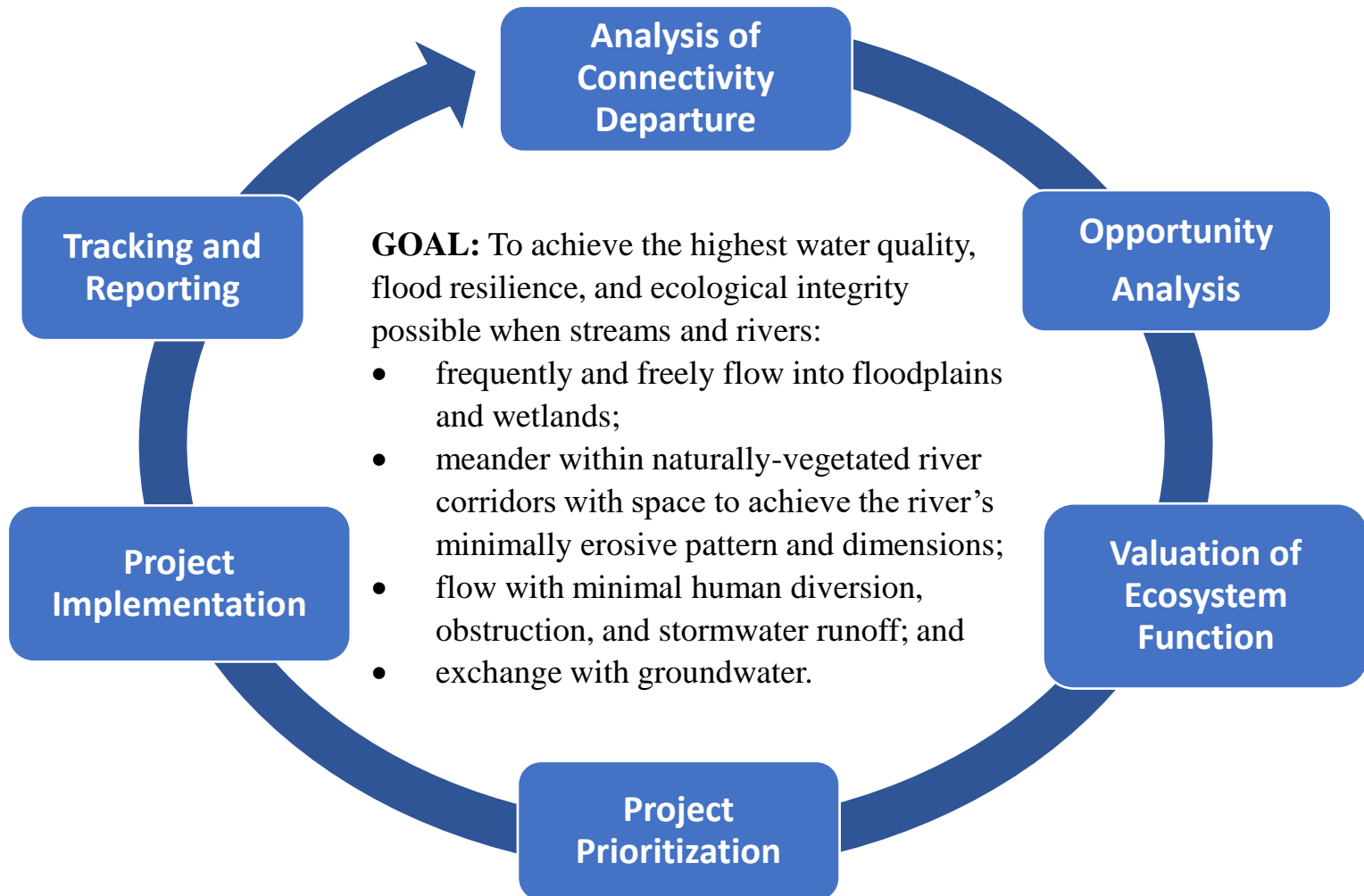
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FFI Tools to be integrated with State Tactical Basin Planning



Human and Intrinsic Values

Water Quality: Free of excessive sediment & nutrient discharges

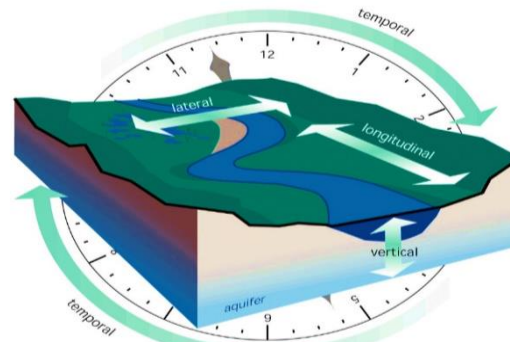
Flood Resiliency: Minimal damage from inundation and fluvial erosion

Ecological Integrity: Viable, native plant & animal communities

Floodplain Functions

1. Maintain least-erosive stream forms (bed & banks)
2. Store flood water and reduce flood peaks
3. Store sediment, nutrients, and organics
4. Establish habitat mosaics & biologic productivity
5. Maximize the movement of fish and wildlife

Connectivity + Fluvial Processes



Function Lost Consider feasibility of re-establishing connectivity, generate benefit-cost data to prioritize sets of restoration and conservation projects.

Function Threatened

Evaluate functions and values that could be lost if connectivity is not protected.

Restoration and Protection

Lateral & vertical connectivity

Restore incised stream channels and remove lateral constraints
Conserve wetlands and river corridors

Longitudinal & temporal connectivity

Remove/replace obstructing dams, bridges, and culverts
Restore natural flows & reduce polluted runoff

Forested/Woody

Buffers

Wetlands

River Corridors

Floodplains

Forested Floodplains

