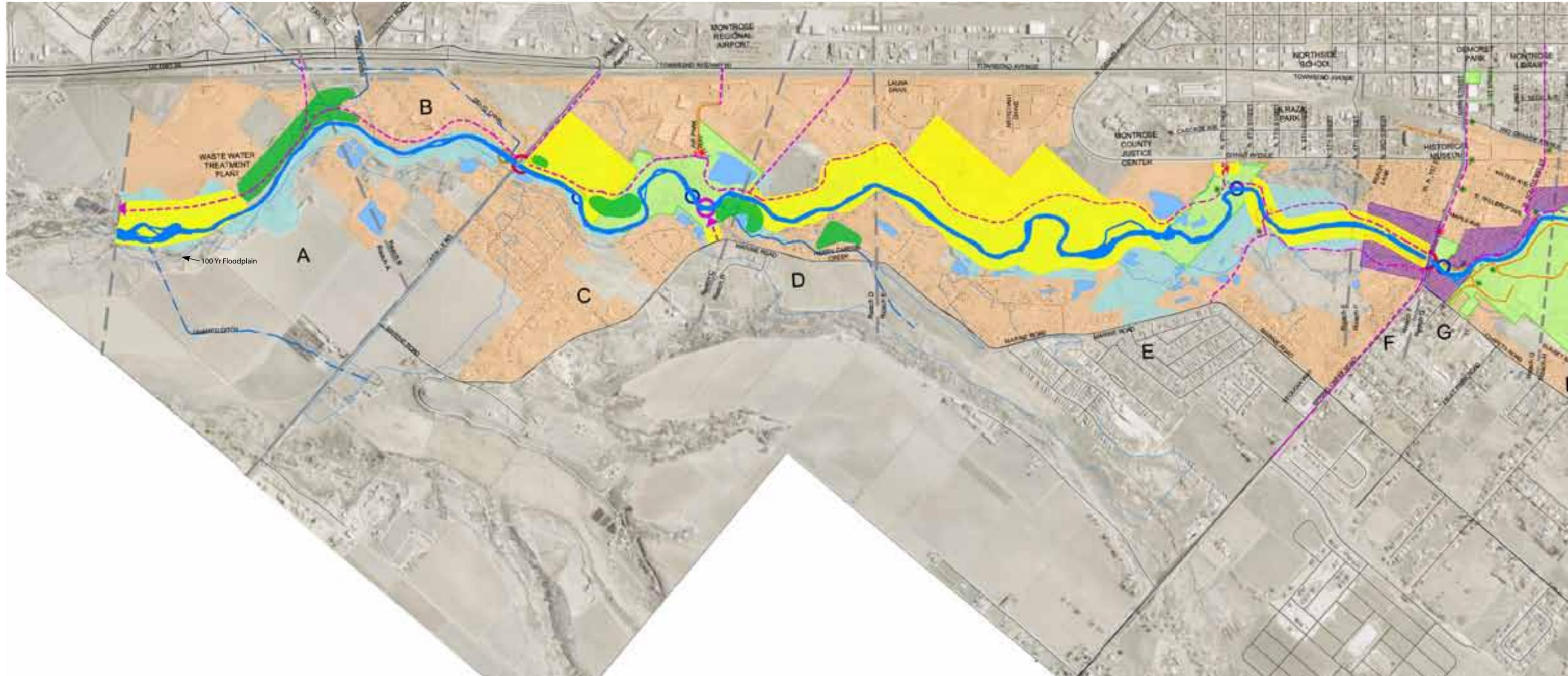
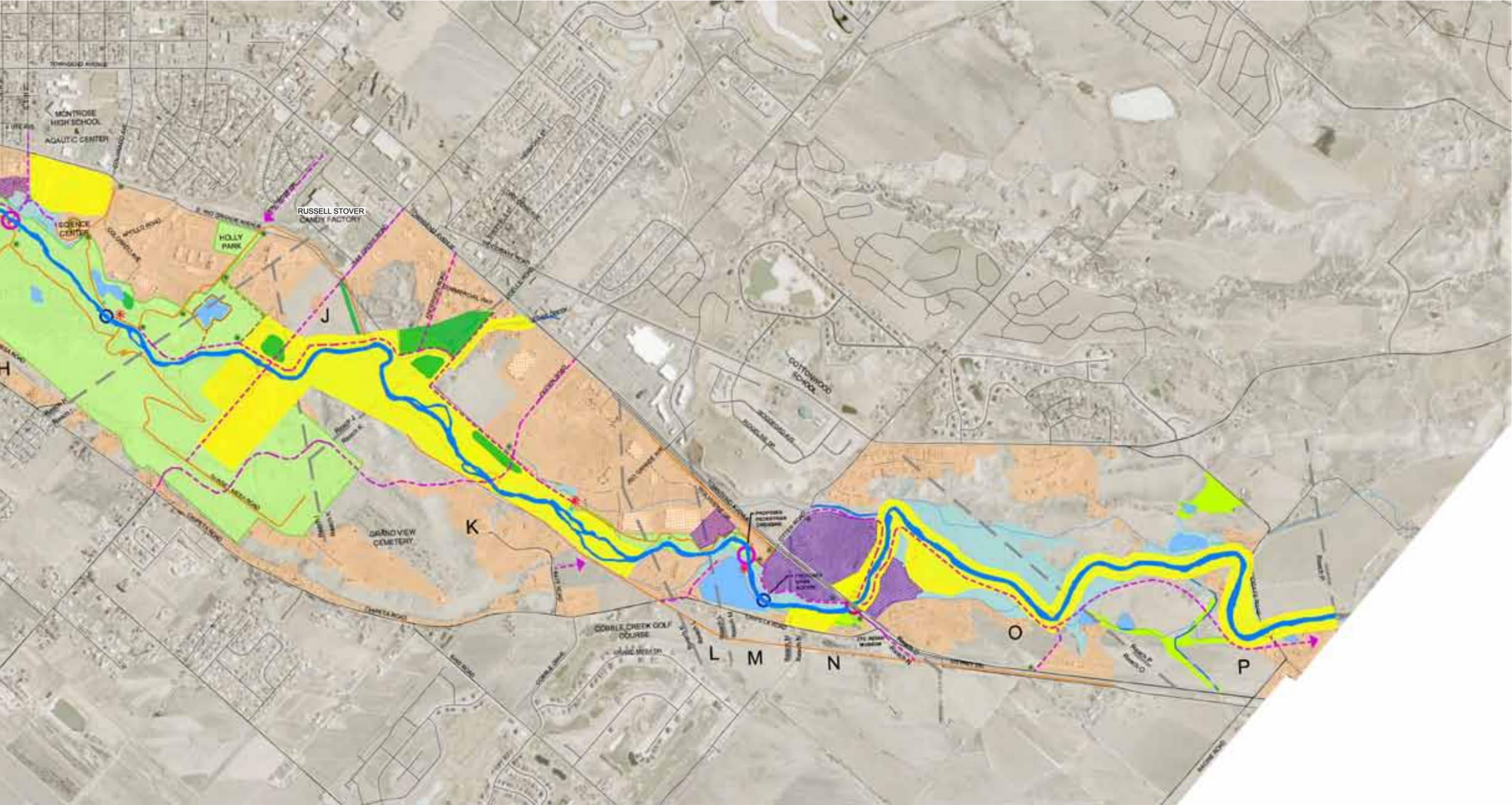
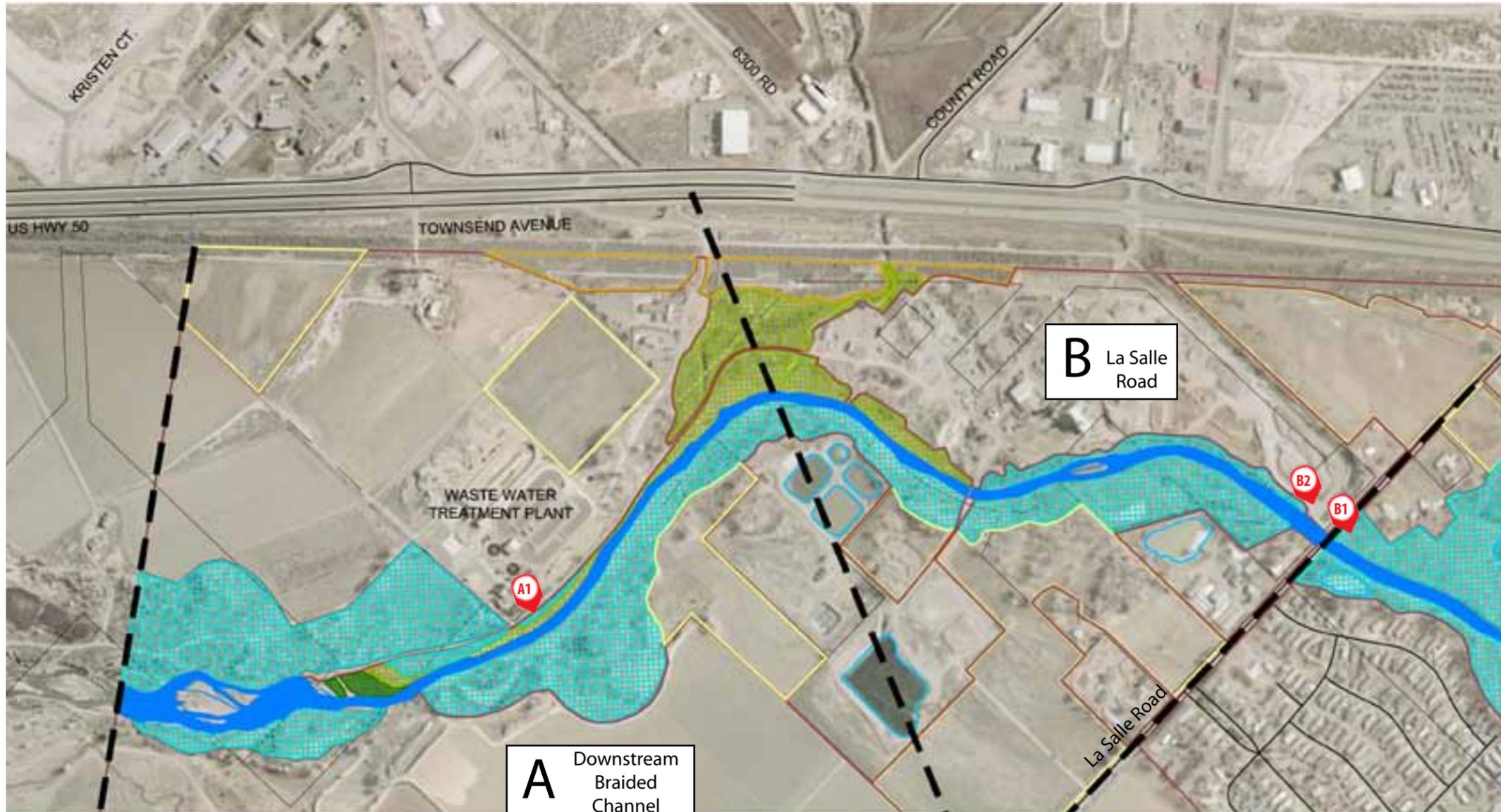


Section 3: Existing Conditions & Recommended Improvements



Existing Concrete Trail	Wetland	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Riparian Vegetation	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Disturbed	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Open Water	Proposed River Access		
Proposed Water Quality Treatment	River Oriented Development			





LEGEND

Existing Concrete Trail	Wetland	Open Water	Upland Shrubland
River	Riparian Shrubland	Grassland	Disturbed
Creek or Canal	Riparian Forest	Turf	
Existing Park	Assessment Reach		



Trail Connections

- Future trail connection from La Salle Road to Waste Water Treatment Plant.
- Future trail connection perpendicular to River from Highway 50 at La Salle Road and Waste Water Treatment Plant Road.
- Future trail connection from Waste Water Treatment Plant to Olathe.
- Future underpass beneath La Salle Road.

Ecological Enhancements

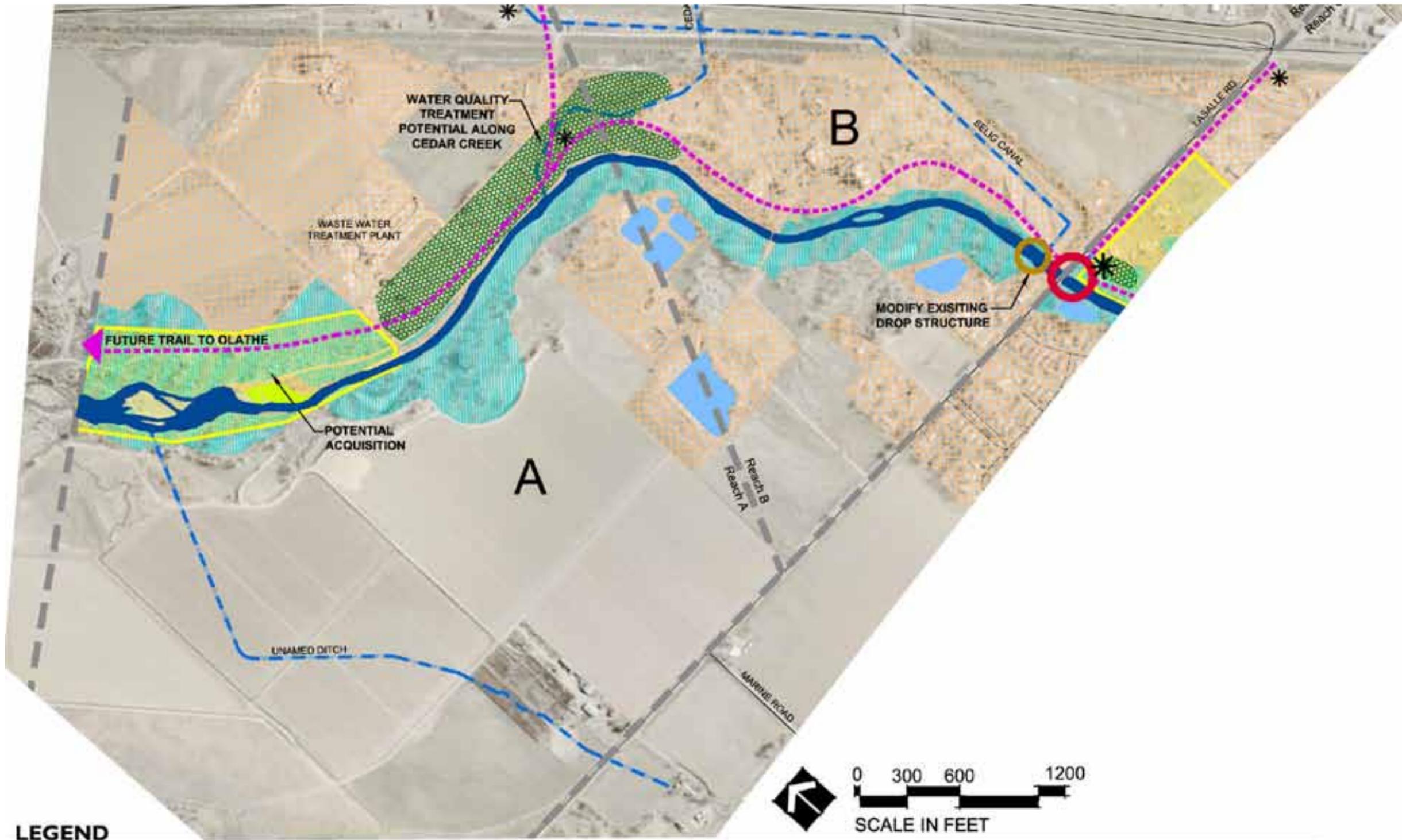
- River bed and banks (Reach A): multiple grade controls required to regain invert; massive bank stabilization project along both banks.
- Overbanks (Reach A): restore/conserves riparian habitat by raising channel invert and stabilizing banks.
- Wildlife and fisheries (Reach A): control water quality in Cedar Creek and Mexican Gulch discharges; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Overbanks (Reach B): restore riparian buffer (most banks need help, but especially right bank along concrete plant).
- Wildlife and fisheries (Reach B): Best Management Practices (BMPs) and natural treatment systems to reduce water quality impacts from Cedar Creek; restoration of riparian canopy close to water's edge would increase shade and woody debris levels in channel for instream habitat improvement and water temperature reductions.

Stormwater Treatment

- Water quality (Reach A): Cedar Creek and Mexican Gulch need comprehensive study to assess water quality impact inputs (feed lot, agricultural run-off, etc). Potential exists to provide improvements.

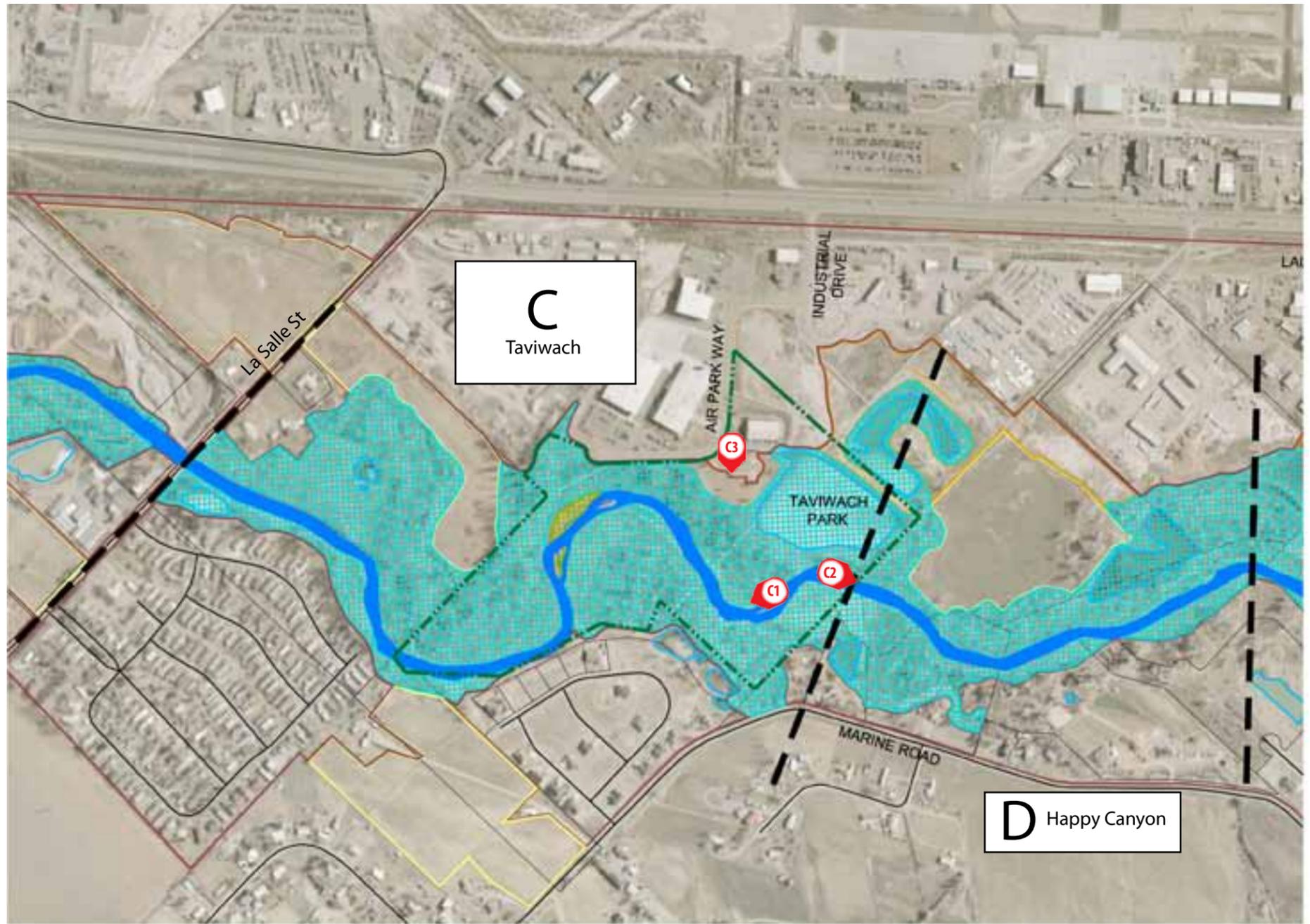
Others

- Explore the potential to improve safety and incorporate a fish ladder at La Salle diversion. Coordinate this effort with the appropriate water authorities.
- Potential exists to create a whitewater feature with the reconstruction of the drop structure with the River or along the Selig Canal.



LEGEND

Existing Concrete Trail	Wetland	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Riparian Vegetation	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Disturbed	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Proposed Water Quality Treatment	Proposed River Access		
Open Water				



LEGEND

Existing Concrete Trail	Wetland	Open Water	Upland Shrubland
River	Riparian Shrubland	Grassland	Disturbed
Creek or Canal	Riparian Forest	Turf	
Existing Park	Assessment Reach		

Section 3 Recommended Improvements | Reach C: Taviwach, Reach D: Happy Canyon

Trail Connections

- La Salle Road to Taviwach Park
- Taviwach Park to North 9th and Grand Park
- River Access at Taviwach Park
- Pedestrian Bridge in Taviwach Park
- Future underpass beneath La Salle Road
- Perpendicular connections from Highway 50 to the River Corridor in multiple locations

Potential Property to Acquire

- Potential trail head and park site on east bank of river south of La Salle Road; potential river access point.
- Parcel off of Marine Rd to connect to Taviwach Park for park access and trail head for pedestrians and vehicles.
- Expand Taviwach Park to the south into Reach D to create a contiguous open space connection with existing pond and riparian corridor.
- Riparian forest straddling both sides of the river in Reach D.

Ecological Enhancements

- River bed and banks (Reach C): minor instream work could restore low flow concentration
- Stabilize and protect right bank of river at Taviwach Ponds, buttressing is option, leave tree (stabilizing roots) in-place until stabilization occurs.
- Stabilize left bank of Lavendar Circle Subreach (bank layback may be an option) and plant buffer.
- Plant willow and cottonwood cuttings along right bank riprap levee between Taviwach and La Salle, east side.
- Potential right bank improvements above levee, including bank layback and Russian olive removal/replacement with natives.
- Overbanks (Reach C): plant riparian buffer in Taviwach Ponds right overbank to provide shading and organic input; create defined access points around ponds for fishing and wildlife observation.
- Wildlife and fisheries (Reach C): Potential for fishing access and false reef habitat in Taviwach Ponds, and enhance riparian habitat around ponds. Understory being cleared, which is detrimental to habitat; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality (Reach C): Stabilize eroding banks near Taviwach Pond and Lavender Circle Subdivision; address point source discharge in Lavendar Circle Subdivision.
- Wildlife and fisheries (Reach D): Restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Prepare and coordinate bank stabilization and riparian buffer/set-back standards with the County for County developments.

Stormwater Treatment

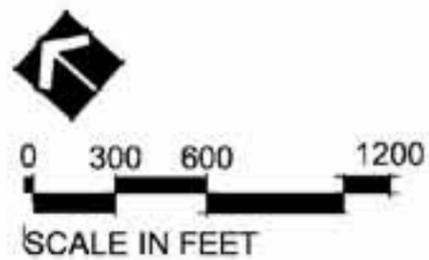
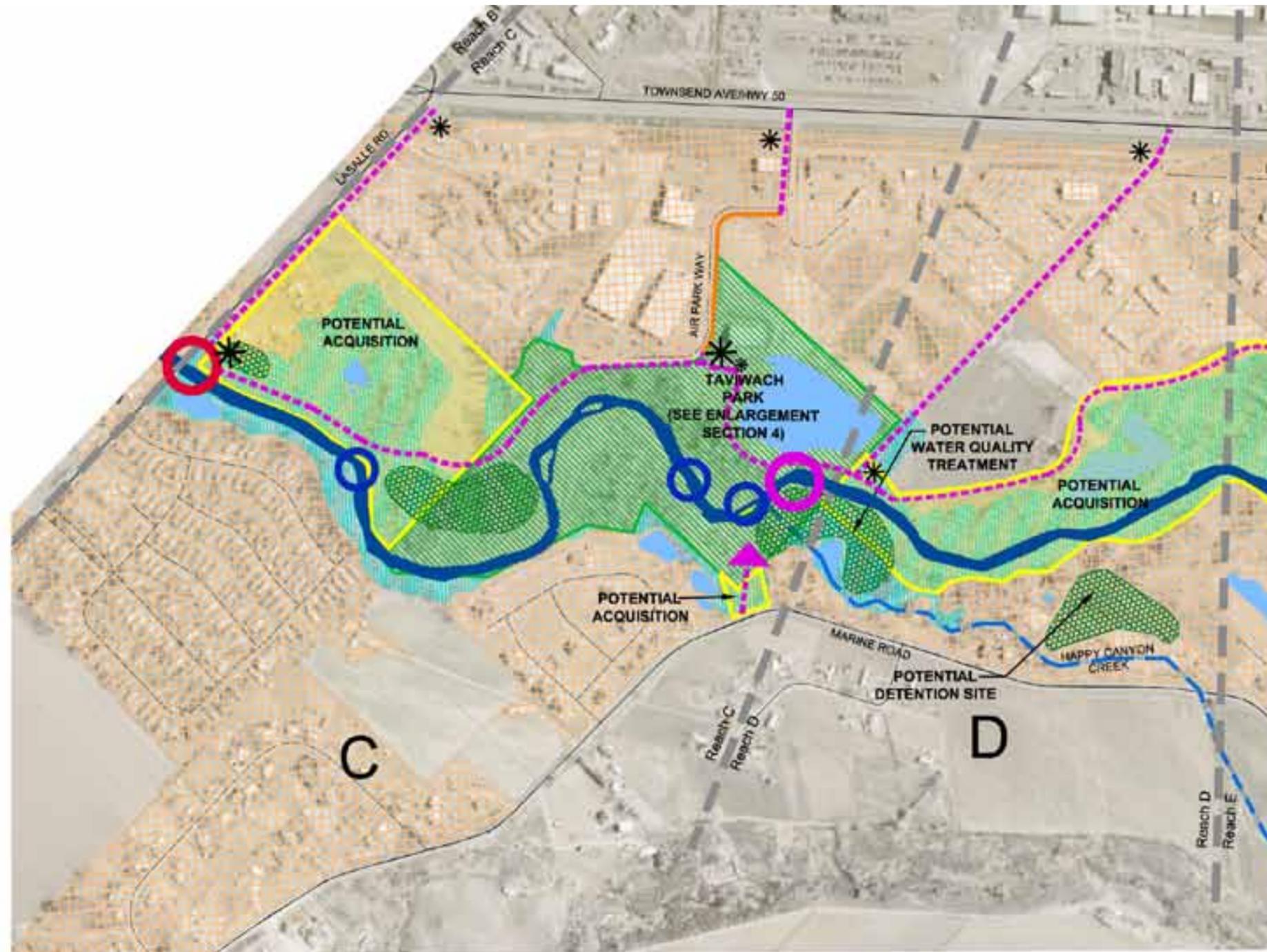
- Potential to provide water quality treatment basin along Happy Canyon Creek.

Others

- Taviwach Park Improvements. Refer to park plan, Section 4.
- Future improvements near La Salle Road should include trailhead parking.



Example of natural surface river access.



LEGEND

Existing Concrete Trail	Wetland	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Riparian Vegetation	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Disturbed	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Open Water	Proposed River Access		
	Proposed Water Quality Treatment			

LEGEND

 Existing Concrete Trail	 Wetland	 Open Water	 Upland Shrubland
 River	 Riparian Shrubland	 Grassland	 Disturbed
 Creek or Canal	 Riparian Forest	 Turf	
 Existing Park	 Assessment Reach		



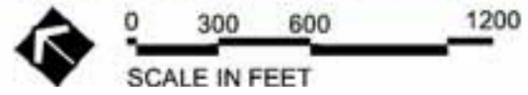
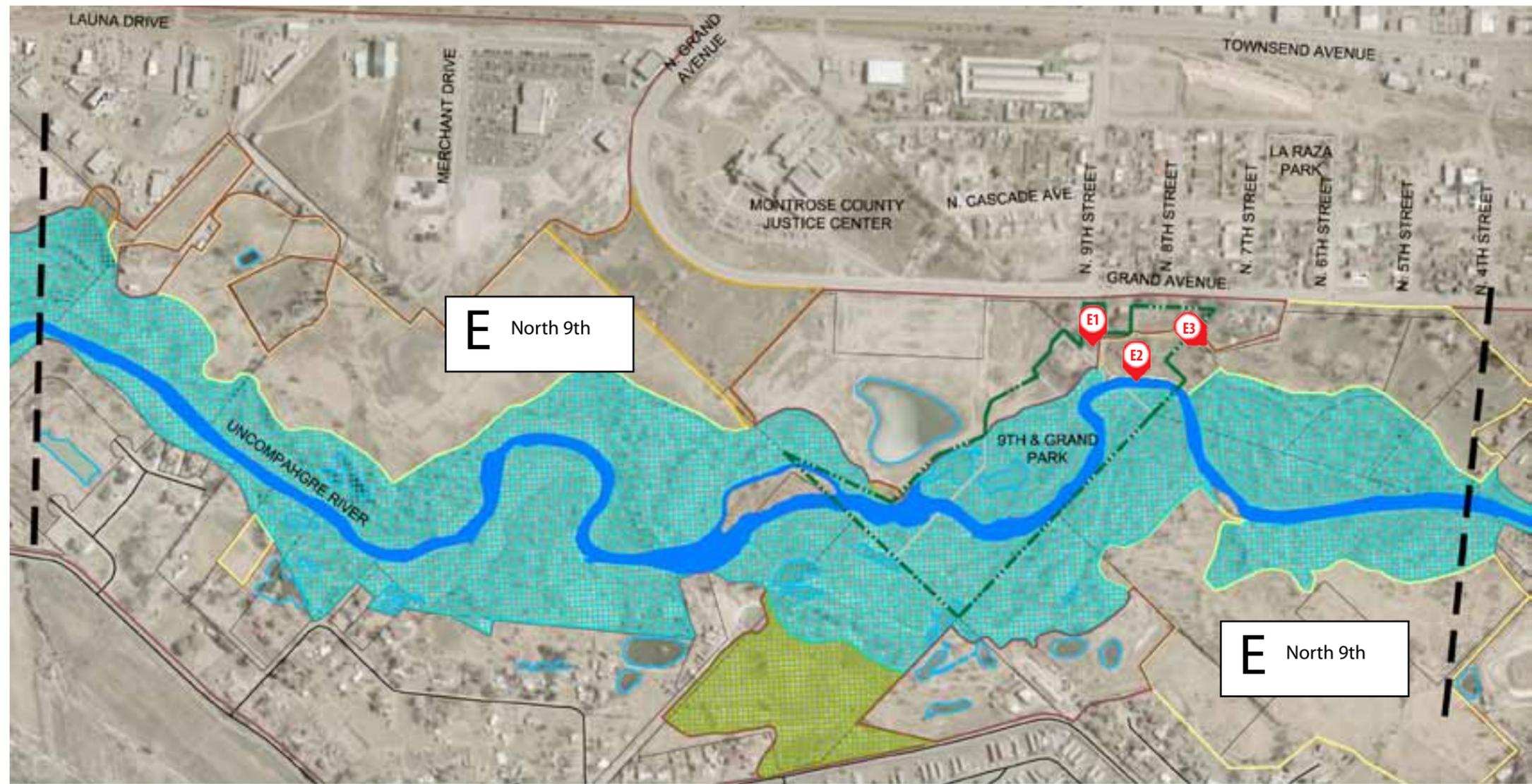
E1



E2



E3



Trail Connections

- Trail connection to Taviwach Park from North 9th St and Grand Ave on east side of river.
- Trail connection from North 9th St and Grand Ave to Main St on east side of river.
- Trail connection from Marine Rd to west side of River, include developed trailhead and parking.
- Pedestrian Crossing.
- River Access at North 9th St and Grand Ave Park.

Potential Property to Acquire

- River corridor within existing riparian vegetation between Main Street and North 9th St and Grand Ave Park.
- Properties adjacent to the Park.
- Preserve large tract of highly functional, mature riparian forest straddling both sides of the river in Reach E, including grasslands that buffer it on the east and west.

Redevelopment Potential

- River adjacent development should emphasize river frontage and provide trail connections. Potential exists for a wide range of complementary uses.

Ecological Enhancements

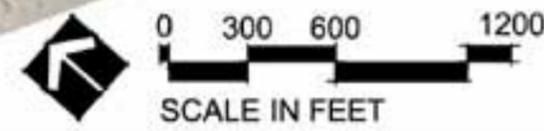
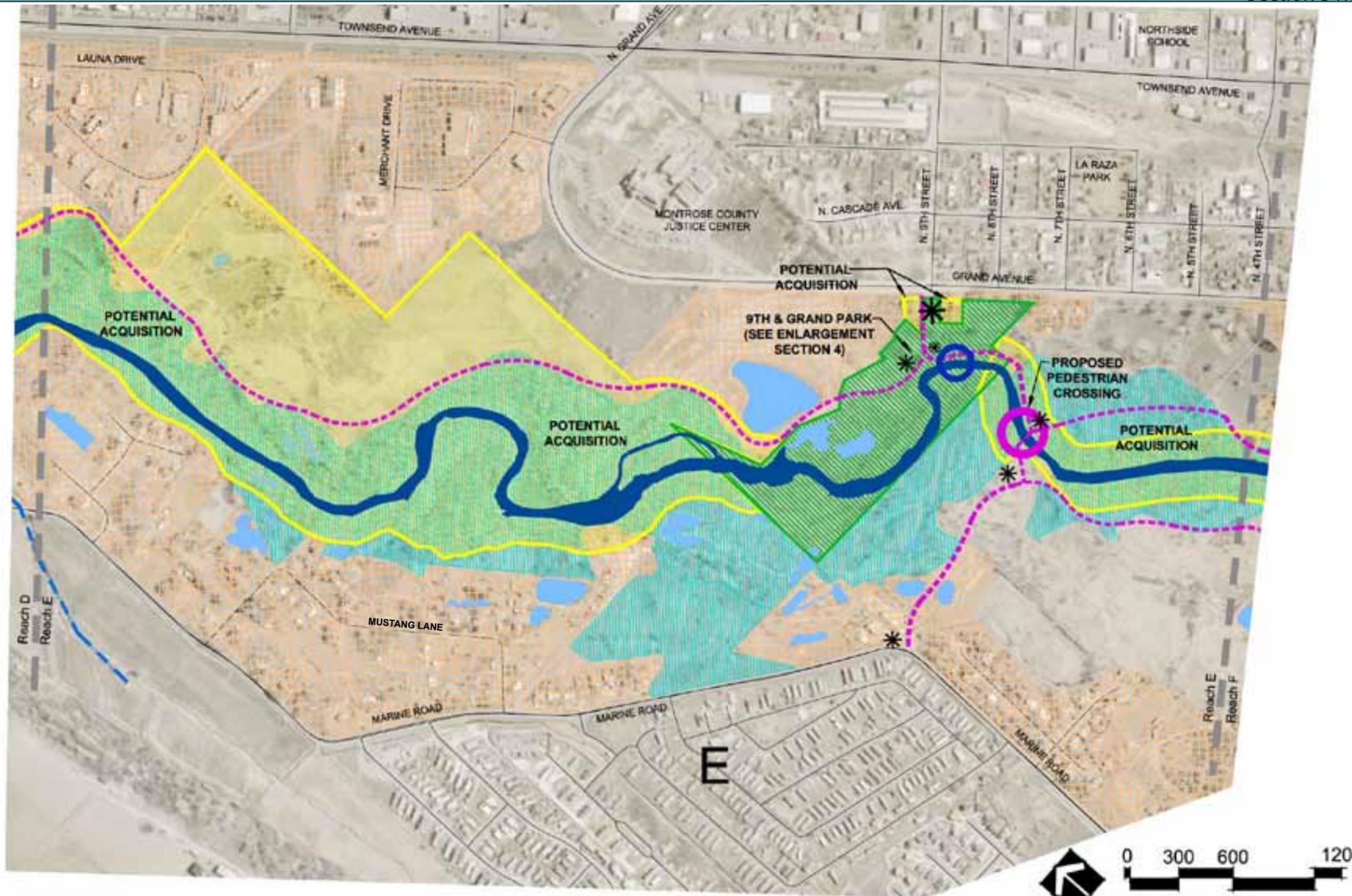
- River bed and banks: bank stabilization required along intermittent sections throughout reach – treatment options include bioengineered and biotechnical methods.
- Repair right bank breach, including low plug to maintain floodplain connectivity.
- Flatwater return of breach water can be enhanced with minimal efforts.
- Fresh (beaver) cut cottonwood can be used for pole plantings on banks/overbanks.
- Regrade and/or otherwise stabilize overly steep and tall fill slopes.
- Stabilize and revegetate areas along toe without vegetation, as well as areas of gravel sidecast berms/fill.
- Immediate option available to protect fishery and stream bed and improve banks.
- Wildlife and fisheries: protection/conservation measures via acquisition; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality: Provide setback and vegetated buffer to protect/enhance water quality where adjacent to drainage sources.
- Improve large open water body north of North 9th St and Grand Ave park for water fowl habitat, to create a buffer between the development and the river which can also serve as a water-front and stormwater quality amenity.

Stormwater Treatment

- There are stormwater outfall points at north end of Grand Ave, North 9th St, North 5th St that need to be upgraded and water quality structures need to be developed. Opportunity for surface systems to enhance infiltration and soil moisture levels.

Others

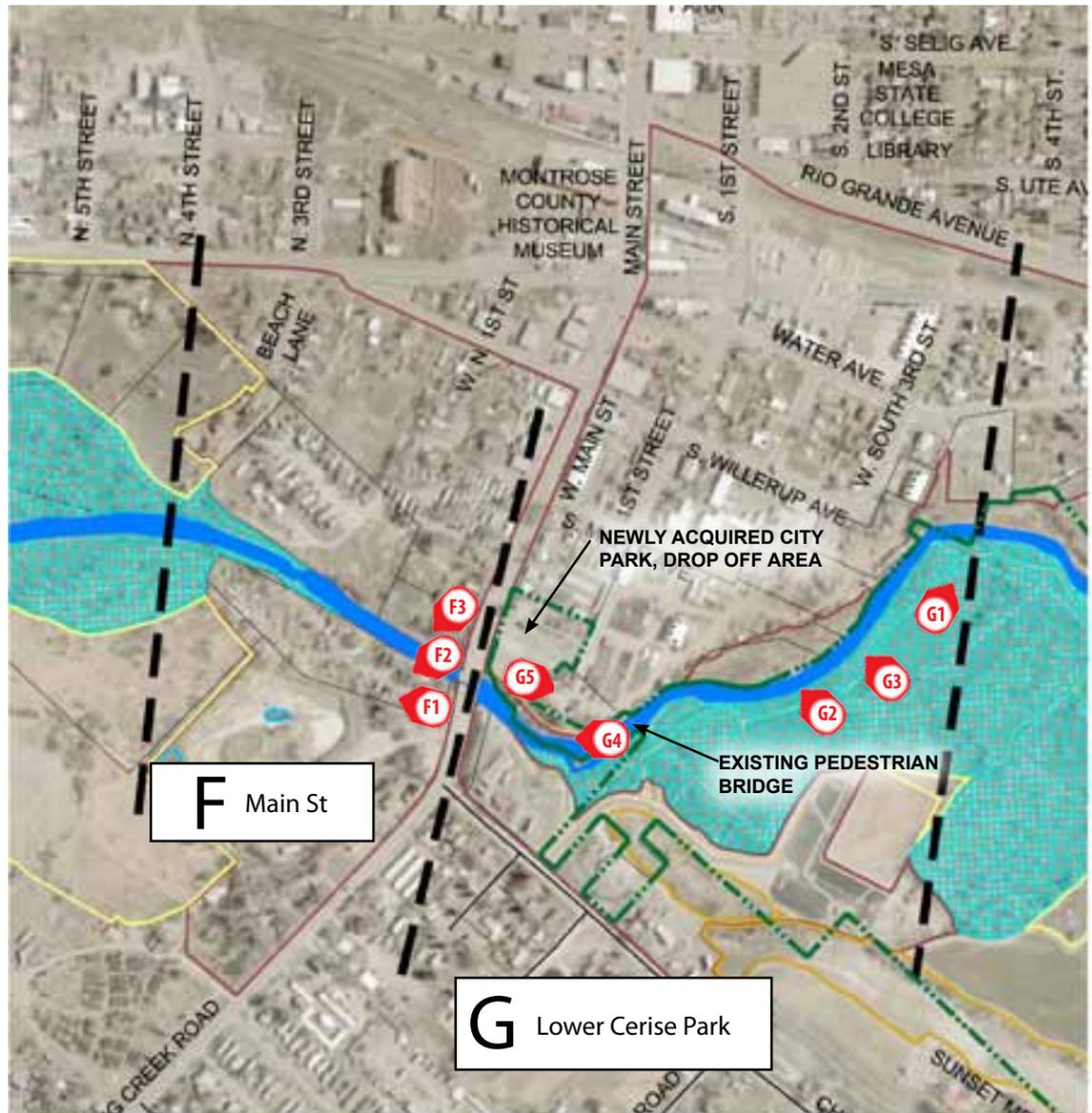
- Develop North 9th St and Grand Ave park site. Refer to park plan, Section 4.



LEGEND

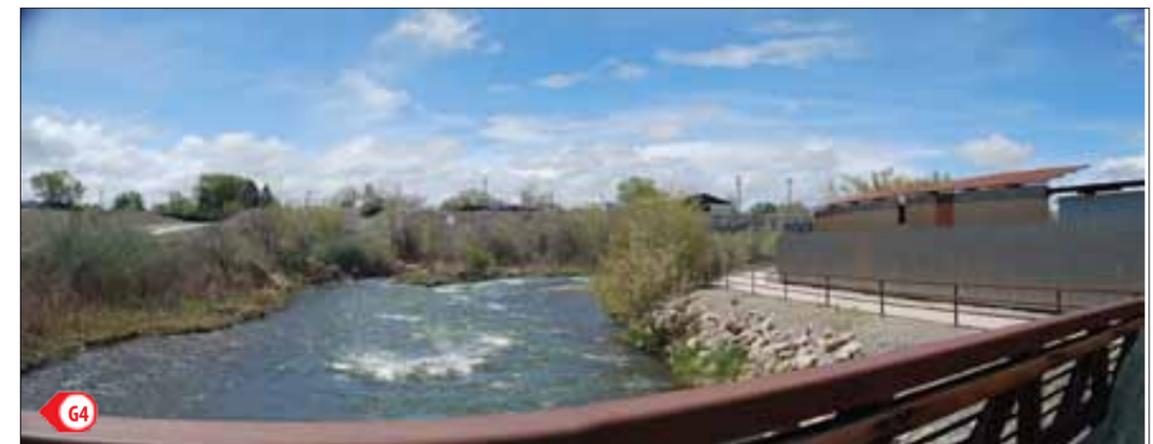
Existing Concrete Trail	Riparian Vegetation	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Disturbed	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Open Water	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Proposed Water Quality Treatment	Proposed River Access		
Wetland				





LEGEND

Existing Concrete Trail	Wetland	Open Water	Upland Shrubland
River	Riparian Shrubland	Grassland	Disturbed
Creek or Canal	Riparian Forest	Turf	
Existing Park	Assessment Reach		



Trail Connections

- Underpass beneath Main St with bridge replacement creating space for pedestrian, wildlife, and emergency vehicle passage.
- Emphasize river crossing on Main St, create a gateway, strengthen connection to downtown with streetscape improvements and improved walkways.
- Trail connection on west side of River to Marine Rd. Potentially soft surface or hard surface.
- Connect Main St to South 5th St on east side of River
- Connect West 3rd St to River

Redevelopment Potential

- Major potential for a mixed-use, walkable redevelopment with river frontage emphasis on both sides of Main Street.
- Old power plant on Bullock property has potential as riverfront development– possible location for hardscape development with riverfront appeal at an already disturbed site.

Ecological Enhancements

- River bed and banks (F): plant banks with willows for stabilization and buffer.
- Overbanks (F): vegetate buffer on both banks with woody riparian species.
- Wildlife and fisheries (F): improve wildlife passage at bridge. Riparian buffer will increase instream habitat value; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality (F): Riparian buffer will increase instream buffering capacity and filter runoff.
- River bed and banks (G): provide buffer and planting along right bank.
- Wildlife and fisheries (G): restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality (G): Best Management Practices to reduce non-point source from Recla Metals site (vegetated swales, buffer strips, etc).

Stormwater Treatment

- There are stormwater outfall points at Main Street that need to be upgraded and water quality structures need to be developed.

Others

- Interpretive signage, gateway element at the west Main Ave bridge.
- Overall river corridor monument signage and/or kiosk.



Private commercial development has the potential to enliven the river's edge with terraces.



The Durango Public Library offers a civic and institutional use that links to the surrounding community via a trail spur along the Animas River Trail. Similarly, civic and commercial uses in this reach have the potential to emphasize views, terraces, native vegetation and stormwater management elements that treat water quality from the paved areas.



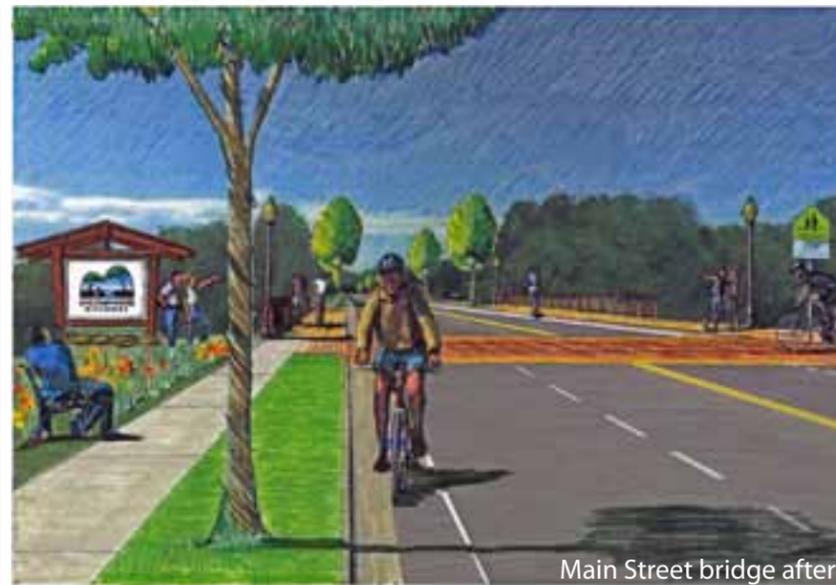
Main Street bridge river corridor before



Main Street bridge river corridor after

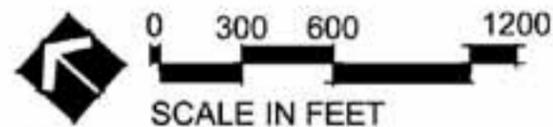


Main Street bridge before



Main Street bridge after

* See Main Street Enlargement on next page



LEGEND

Existing Concrete Trail	Wetland	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Riparian Vegetation	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Disturbed	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Open Water	Proposed River Access		
Proposed Water Quality Treatment	River Oriented Development			

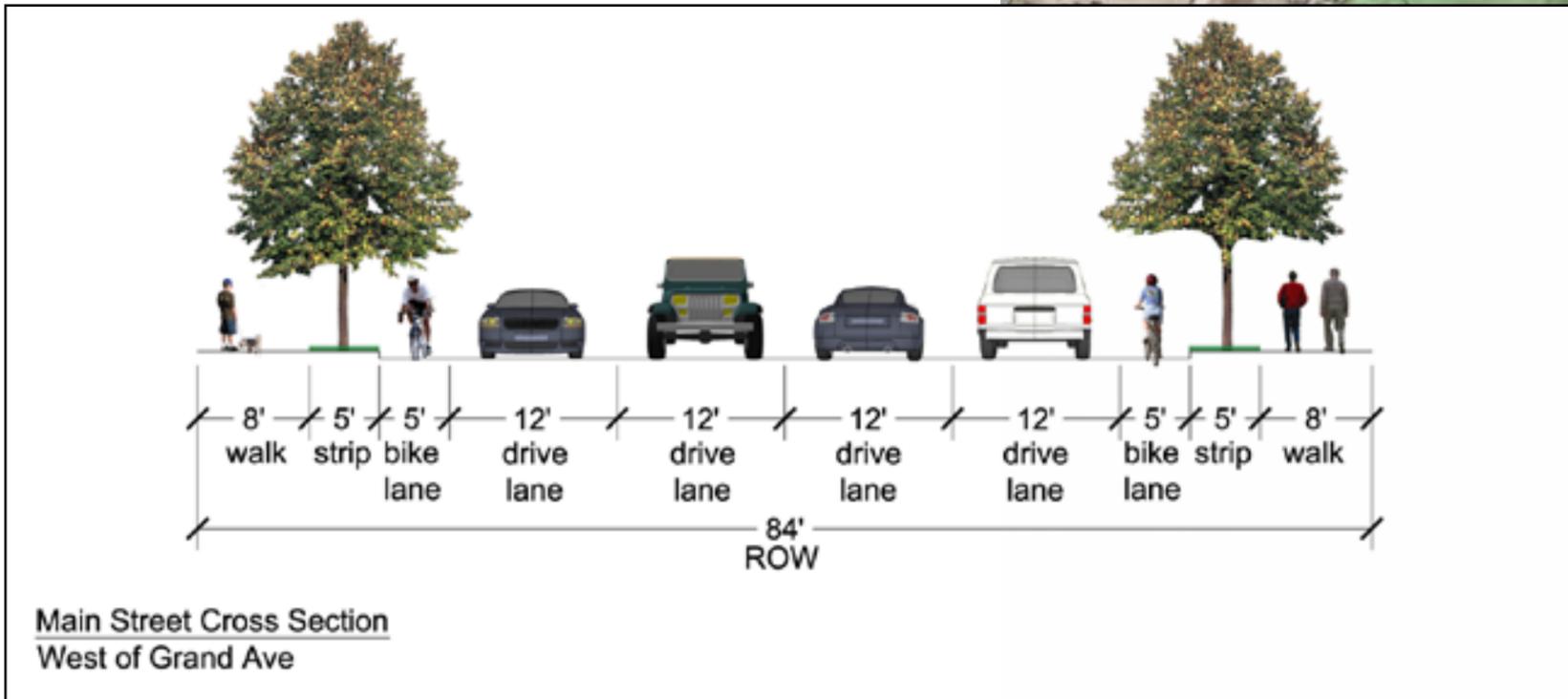


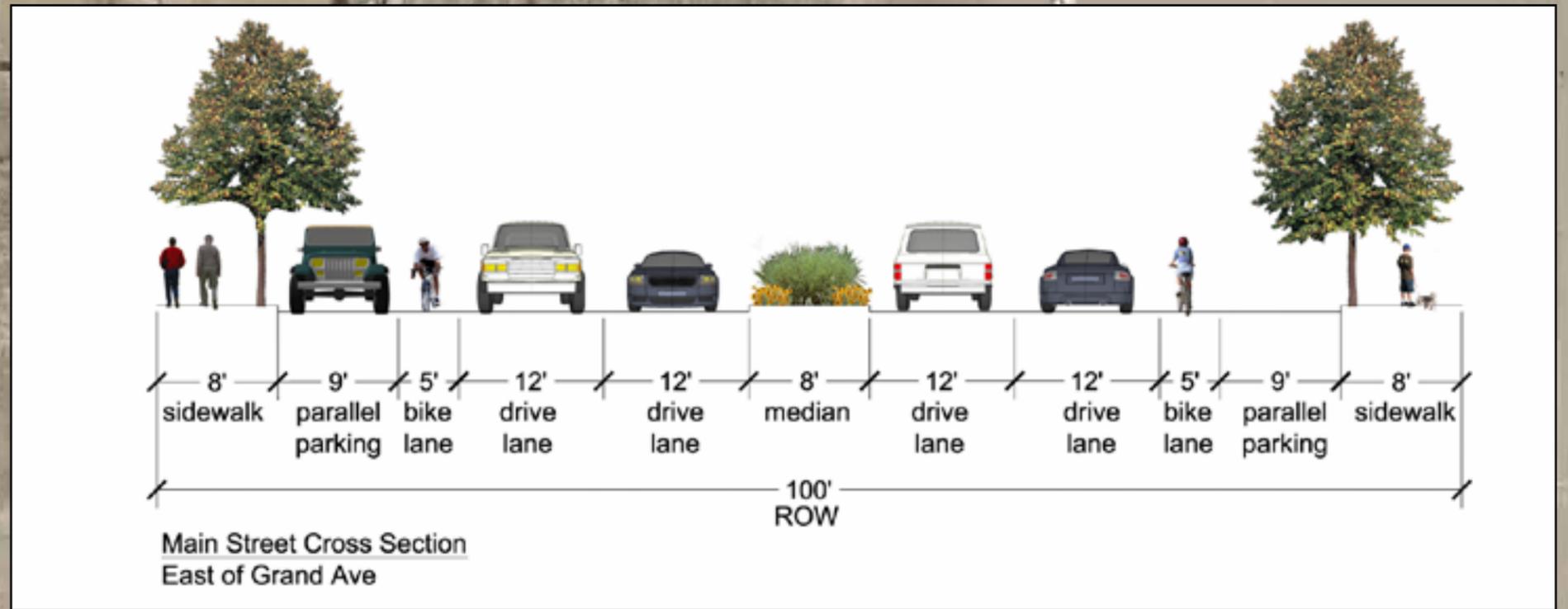


Pedestrian/Streetscape Light



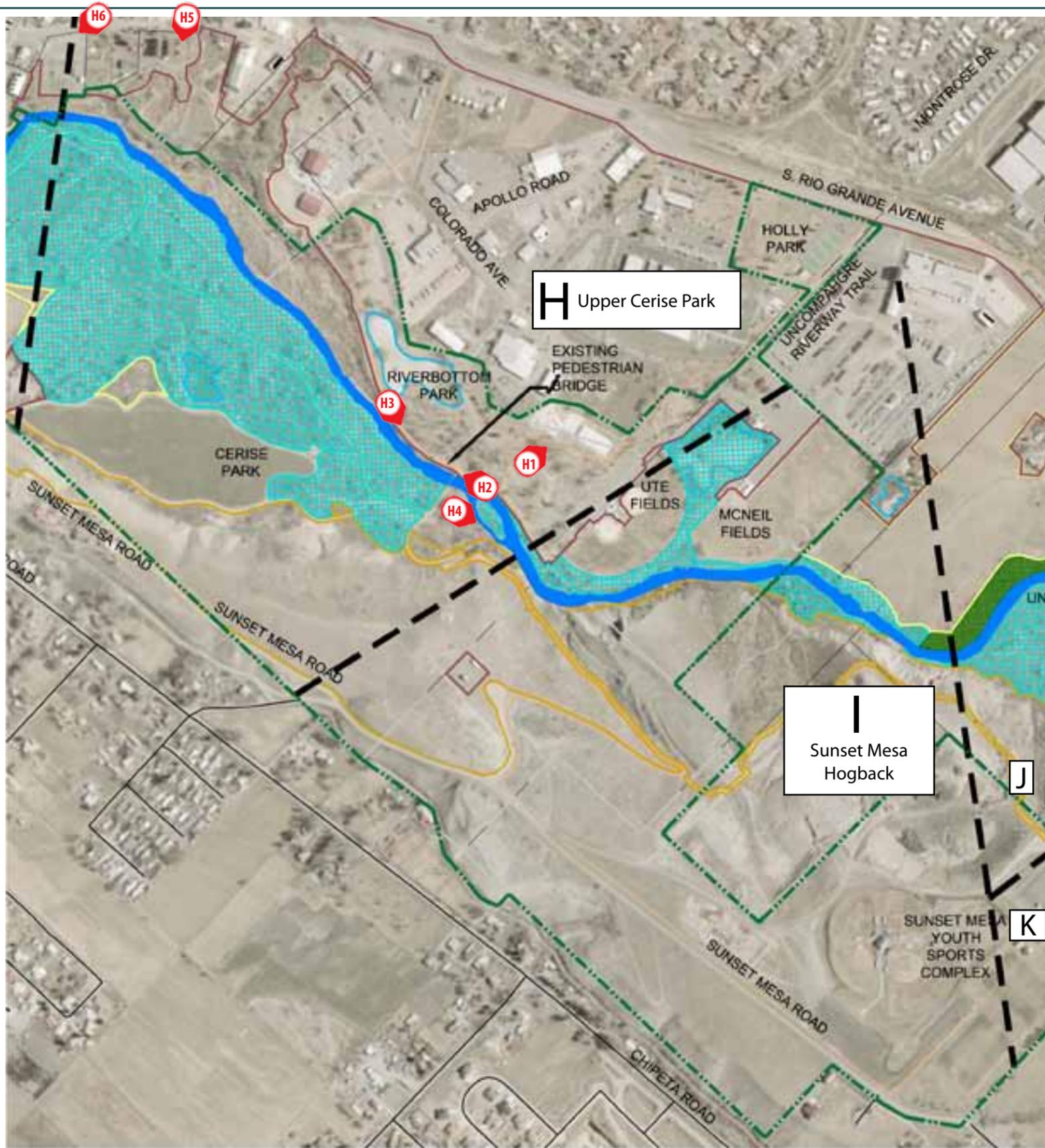
Streetscape Enhancement Potential along Main Street





LEGEND

 Existing Concrete Trail	 Wetland	 Open Water	 Upland Shrubland
 River	 Riparian Shrubland	 Grassland	 Disturbed
 Creek or Canal	 Riparian Forest	 Turf	
 Existing Park	 Assessment Reach		



existing signage



Trail Connections

- Connect South 5th St to existing trail near Science Center and Aquatic Center, incorporate trailhead parking.
- Soft Surface trail in Sunset Mesa south.
- Potential link at Ute Fields and McNeil Field.
- Upgrade existing trail route to full standard per Section 2.

Potential Property to Acquire

- River front property both sides of river south of McNeil Fields
- Preserve or protect riparian habitat north of the Science Center that extend east from the river and use a living laboratory and trail conduit to the river itself.

Ecological Enhancements

- River bed and banks (H): opportunities to increase low flow diversity and habitat via instream structures (evaluation needed first of current performance of previous Fishing is Fun project); minor bank stabilization still needed in localized sections, especially at high recreation traffic areas.
- Overbanks (H): continue phased Russian Olive eradication; interplant cottonwood and native shrubs in areas where regeneration is poor; consider alternative strategies for the remaining very dense Russian Olive stands; provide further stream and pond habitat throughout for diversity and hydrologic modification (consider another pond/wetland to help spread water through park area); protocols for maintenance vehicle access (e.g., careful to stay on path at corners) can reduce ongoing (minor) disturbances.
- Wildlife and fisheries (H): many forested areas were burned (similar to Reach G) so increased patrol may be necessary; potential to install wildlife observation platforms/blinds connected via native trails; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Overbanks (I): right overbank needs better woody buffer.
- Wildlife and fisheries (I): consider wildlife friendly fence at Mitchell boundary; instream habitat diversity from structures; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Reduce social trails that stray from the established trails in order to reduce habitat degradation and to preserve habitat.
- Implement native upland grass and shrub revegetation concurrent with noxious weed and tree removal.

Stormwater Treatment

- There are stormwater outfall points at Recreation District pond at McNeil Fields and existing bermed low area at west end of Colorado Ave (behind bus barn) that need to be upgraded and water quality structures need to be developed per the stormwater drainage master plan.
- Create a natural treatment system to filter water entering pond at Riverbottom Park to help with water clarity and quality.
- Water quality (I): Use BMPs to define turf amendment setback from top of bank, no-mow zone.
- Water quality (H): Control and maintain buffer width along right overbank to ensure water quality.

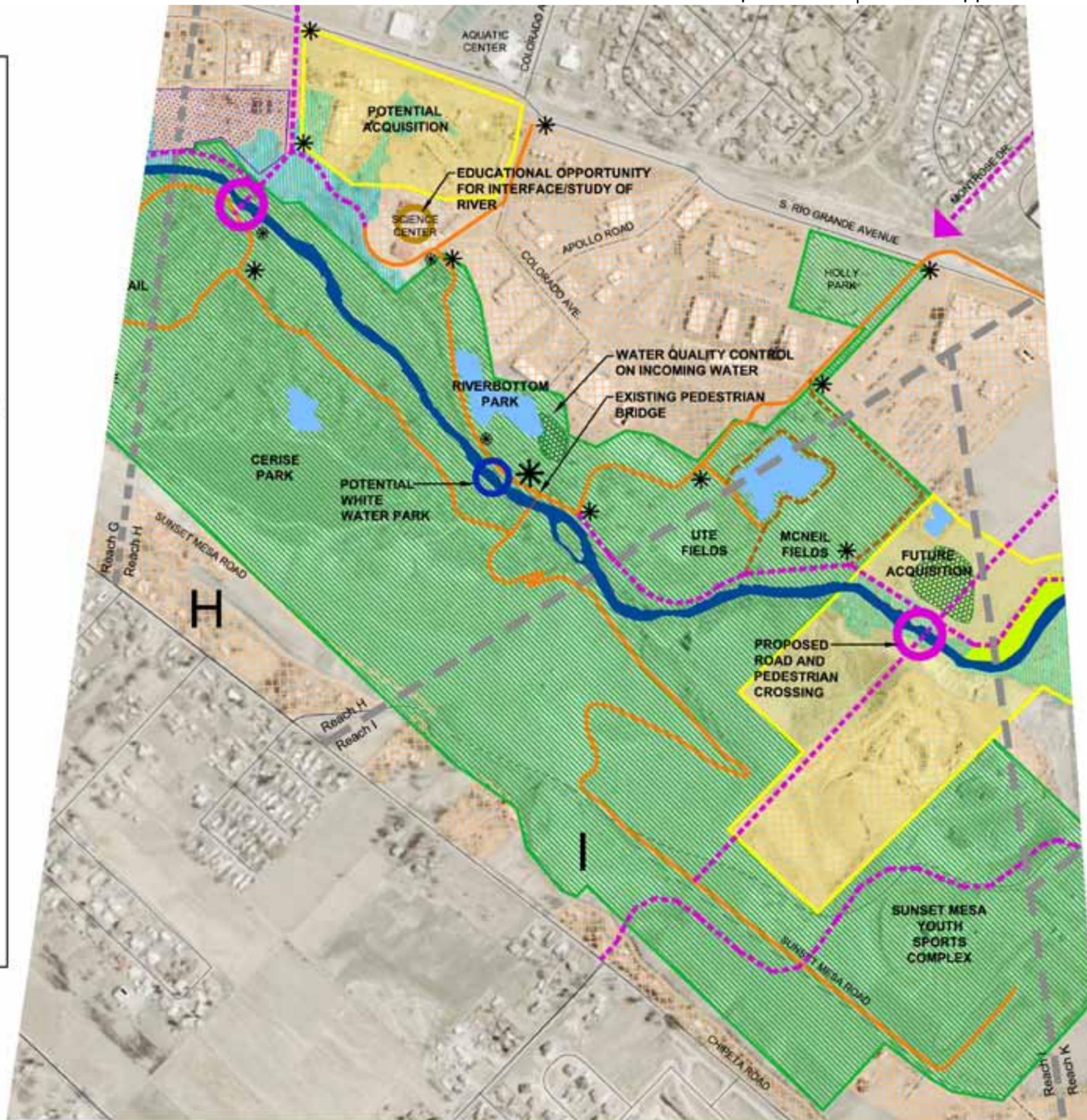
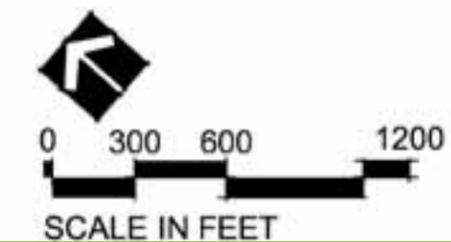


Others

- Whitewater Park potential in Riverbottom Park to comply with all required agency regulations, refer to Section 4.
- Add interpretive signs
- River bed and banks (I): consider large features for kayak course that also provide cover and flow diversity for fish (e.g., weirs, habitat boulders); bank layback is severely constrained by utility line near top of right bank, as well as sections of scrub oak on left bank (vertical banks in these sections are providing mud swallow habitat).

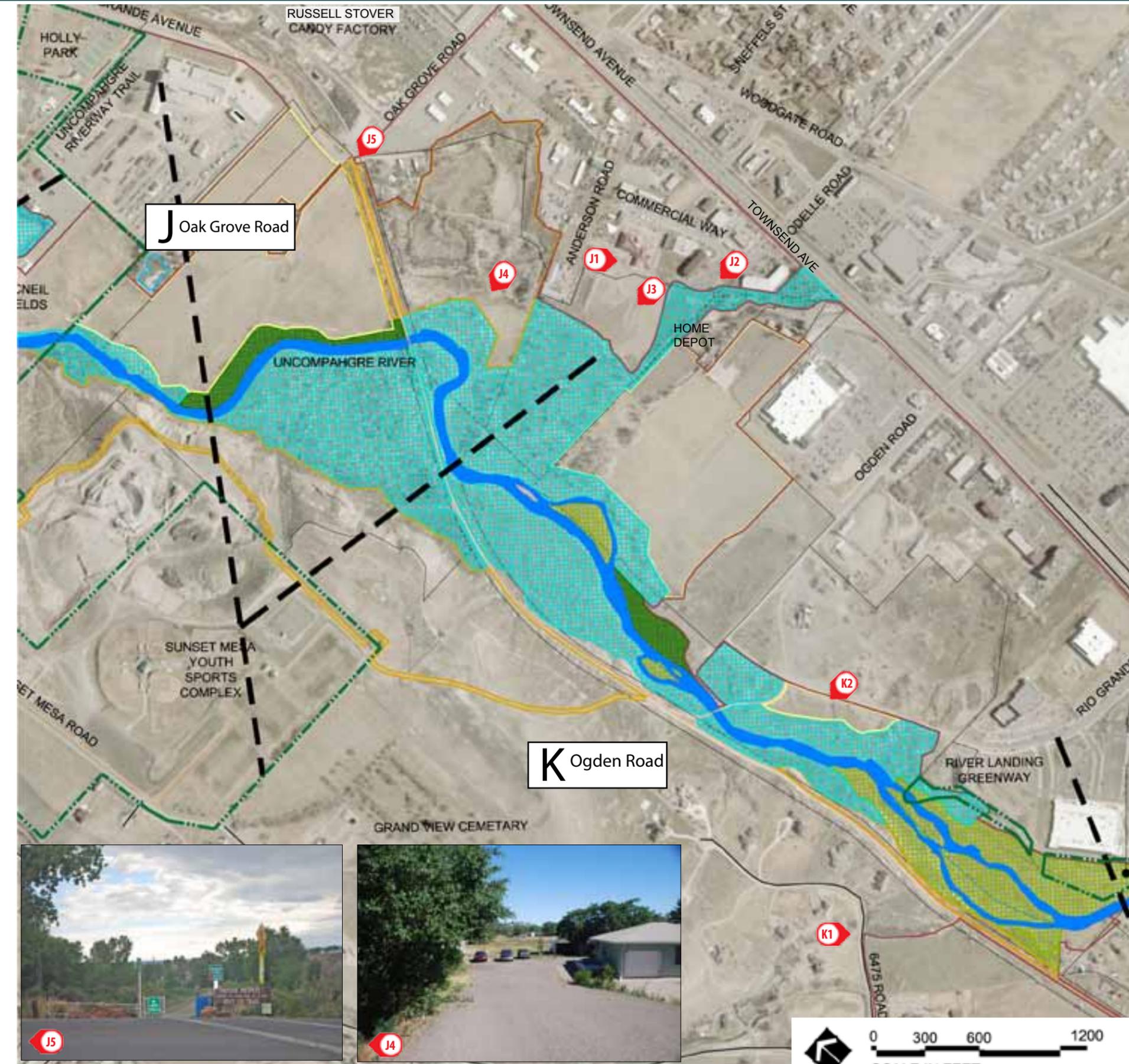
LEGEND

-  Existing Concrete Trail
-  River
-  Creek or Canal
-  Existing Park
-  Wetland
-  Riparian Vegetation
-  Disturbed
-  Open Water
-  Proposed Trail Connection
-  Proposed Soft Trail Connection
-  100-year Floodplain
-  Potential Acquisition
-  Proposed Water Quality Treatment
-  River Oriented Development
-  Proposed River Access
-  Proposed Pedestrian Crossing
-  Other Improvements
-  Proposed Underpass
-  Monument Signage
-  Directional Signage
-  Interpretive Signage



LEGEND

 Existing Concrete Trail	 Wetland	 Open Water	 Upland Shrubland
 River	 Riparian Shrubland	 Grassland	 Disturbed
 Creek or Canal	 Riparian Forest	 Turf	
 Existing Park	 Assessment Reach		



Trail Connections

- Connect Ute Fields to Railroad Bridge. Coordinate alignment with potential Rio Grande extension if possible.
- Anderson Road connection.
- Dry Cedar Creek/Odelle Road Spur.
- Connect Railroad bridge to River Landing.
- Proposed road and pedestrian crossing and underpass at Ogden. Coordinate with potential roadway crossing.
- Connect Sunset Mesa south to Ogden.
- Upgrade existing trail route to full standard per Section 2.

Potential Property to Acquire

- River front property both sides of river south of fields.
- Preserve the confluence of Dry Cedar Creek and the river.

Ecological Enhancements

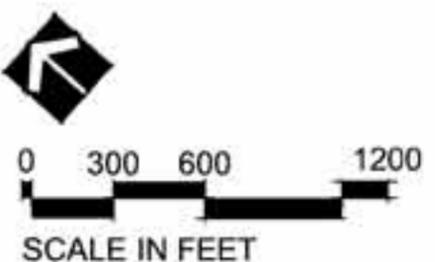
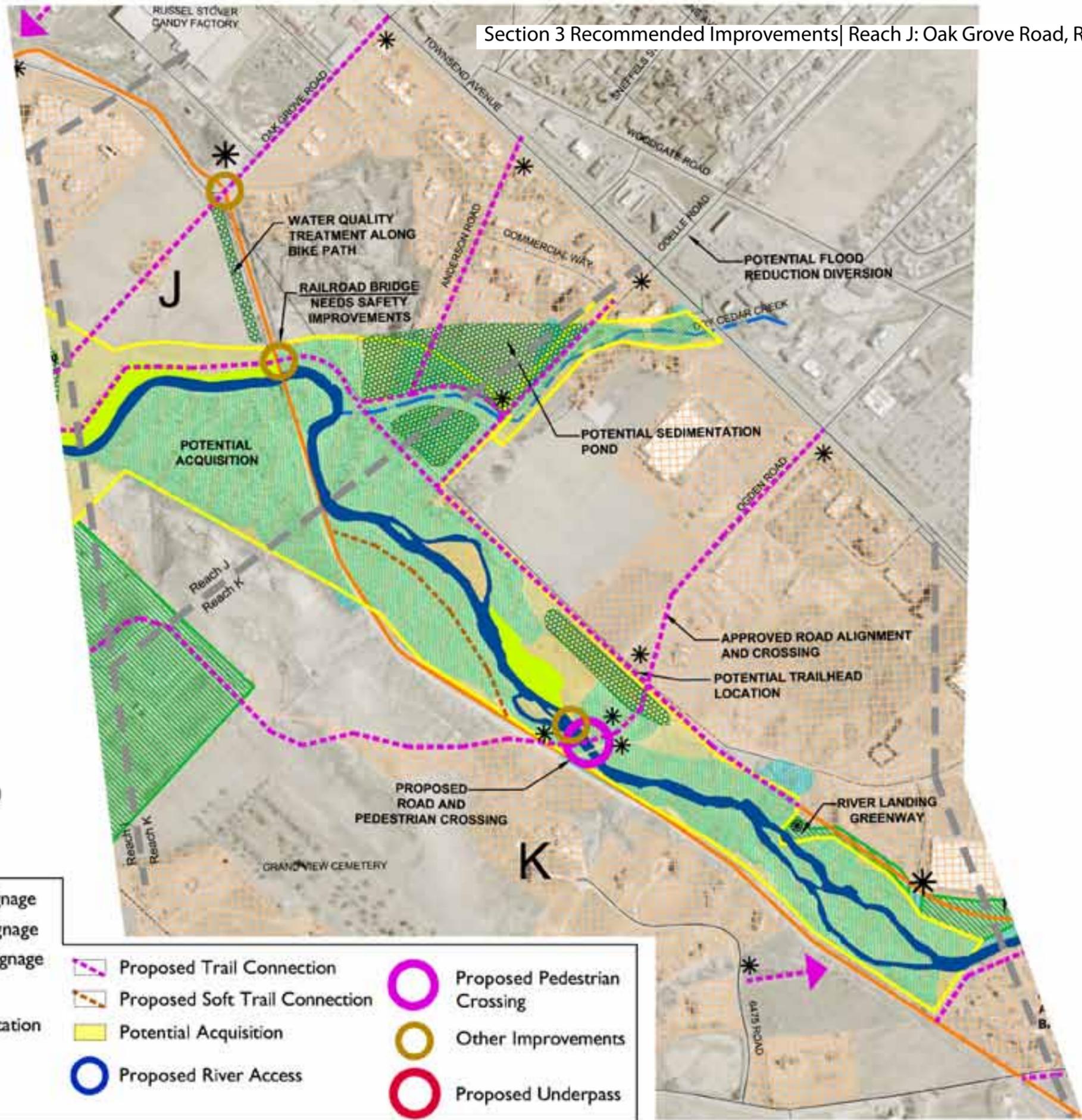
- River bed and banks (J): right bank upstream of Railroad Bridge needs stabilization; left bank where Railroad Bridge Trail abuts bank needs vegetation in riprap bank – treatment options include willow cutting interplanting; remove three small remnant piles of cobbles/gravels located at toe of right bank/investigate sales of materials to offset removal and haul costs.
- Overbanks (J): management could lead to a very nice natural area; left bank forest needs management for Russian Olive and measures to protect burned bark against infection; opportunities for backwater nursery and wetland habitat on right overbank, - can work with selenium reduction efforts.
- Wildlife and fisheries (J): habitat can be improved via management as natural area; restoration of riparian canopy close to water’s edge would increase woody debris levels in channel for instream habitat improvement.
- Wildlife and fisheries (K): beaver protection required on trees; restoration of riparian canopy close to water’s edge would increase woody debris levels in channel for instream habitat improvement.
- Reduce social trails that stray from the established trails in order to reduce habitat degradation and to preserve habitat.
- Overbanks (K): gravel operations need improved BMPs to protect habitat and water quality, opportunities for backwater nursery and wetland habitat on right overbank, which can work with selenium reduction efforts; stabilization of soil cliffs in left overbank along Railroad Bridge Trail.

Stormwater Treatment

- There is a stormwater outfall point at the west end of Oak Grove Road that needs to be upgraded and water quality structures should be developed.
- Create a natural treatment system to filter water entering the river from Dry Cedar Creek.
- Water quality (K): stabilize soil cliffs in left overbank (between Railroad Bridge Trail and river), including BMPs at toe, to reduce sediment delivery to river.
- A potential detention/water quality treatment site exists between Commercial Way businesses and Dry Cedar Creek. Space is available to provide surface sediment removal basins.
- Flood reduction potential for Dry Cedar Creek to receive stormwater diverted from Odelle Rd/Highway 550 to reduce flooding at Oak Grove Rd/Highway 550 per storm drain plan.
- Water quality needed at storm drain outfall to River from Oak Grove Road. Potential to route stormwater along existing bike path.

Others

- Improve safety at the Railroad Bridge.
- Develop existing trailhead parking lot on Oak Grove Road.
- Improve lateral connections to the River at Anderson Road, Odelle Road, and Ogden Road. Trailhead parking should be considered in all locations.
- Development of future roadway crossings to include monument sign.
- A roadway crossing over the river would require an underpass.

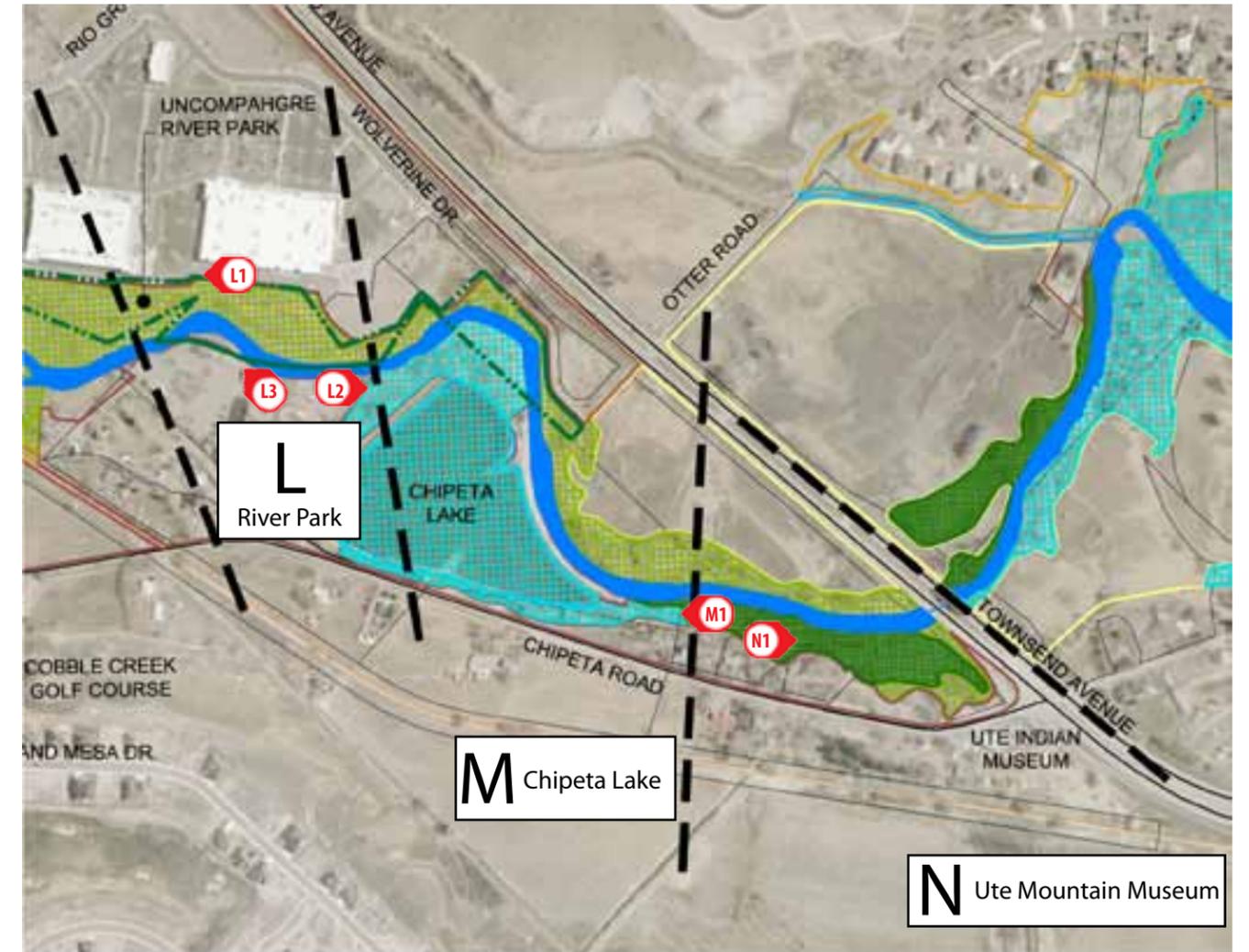
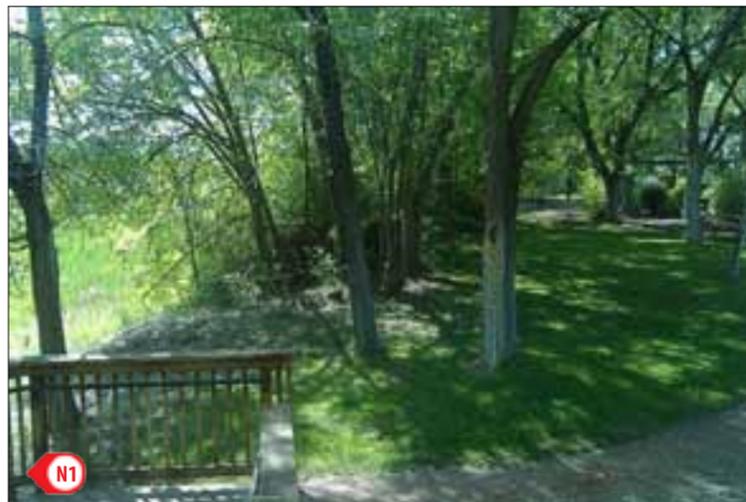


LEGEND

Existing Concrete Trail	Monument Signage	Proposed Trail Connection	Proposed Pedestrian Crossing
River	Directional Signage	Proposed Soft Trail Connection	Other Improvements
Creek or Canal	Interpretive Signage	Potential Acquisition	Proposed Underpass
Existing Park	Wetland	Proposed River Access	
Proposed Water Quality Treatment	Riparian Vegetation		
Open Water	Disturbed		
100-year Floodplain			

LEGEND

 Existing Concrete Trail	 Wetland	 Open Water	 Upland Shrubland
 River	 Riparian Shrubland	 Grassland	 Disturbed
 Creek or Canal	 Riparian Forest	 Turf	
 Existing Park	 Assessment Reach		



Trail Connections

- Proposed future underpass beneath Townsend for pedestrians and wildlife movement.
- Proposed River Access.
- Connect Existing Trail at River Landing to Townsend Ave.
- Connect trail to Chipeta Road.
- Trailhead improvement as part of the Gateway monument.
- Pedestrian Bridge on west side of Townsend Bridge.

Redevelopment Potential

- Development potential with river frontage emphasis. Sensitivity to visual impacts relative to building massing along the river corridor.

Ecological Enhancements

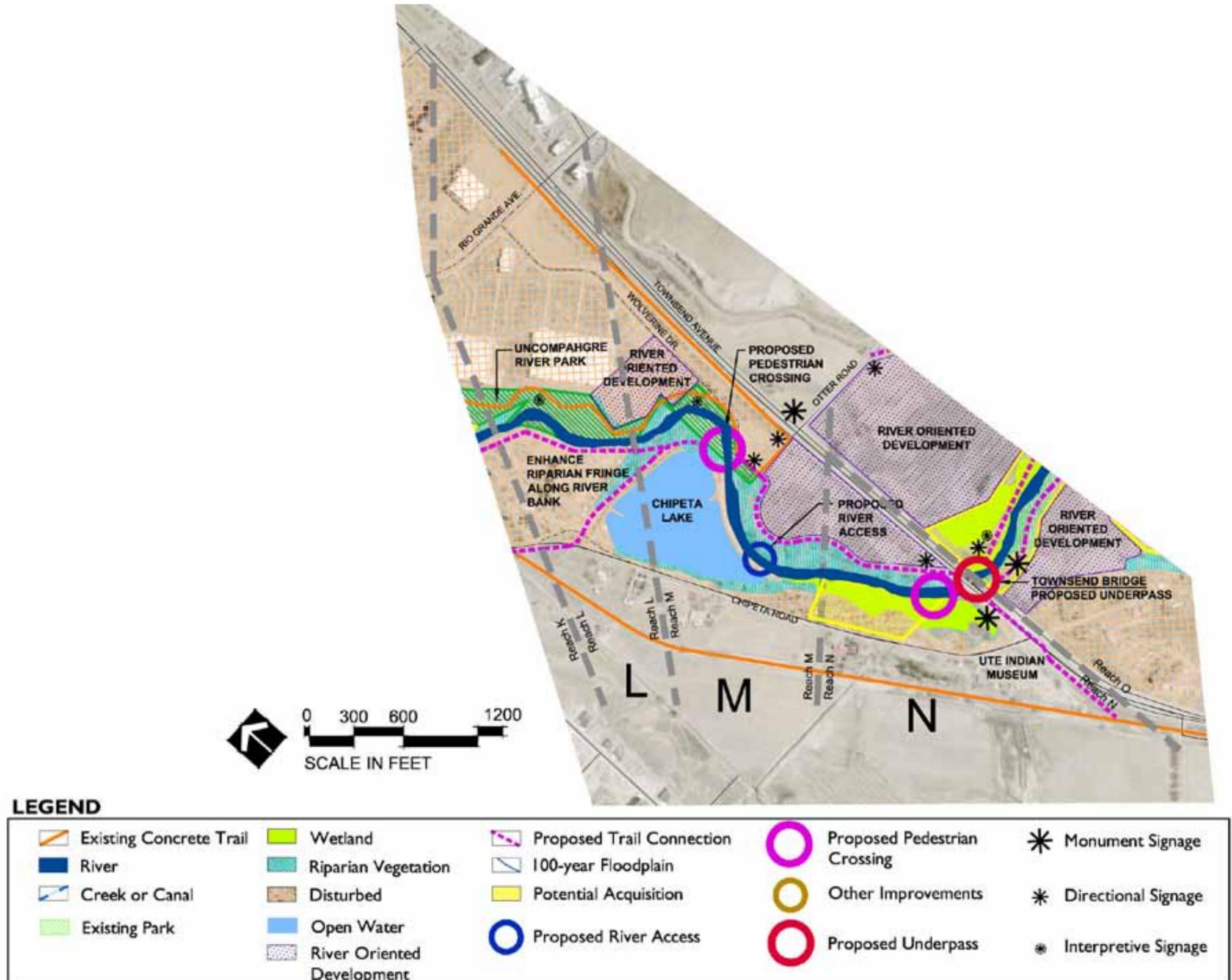
- River bed and banks (L): Left bank restoration and vegetation with defined fishing access for guests; left bank layback is not a likely option due to new structures located at immediate top of (oversteepened) bank.
- Overbanks (L): Plant riparian buffer on left bank with grass to improve filtration of drainage.
- Wildlife and fisheries (L): Bank stabilization and vegetation will improve habitat; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality (L): Bank stabilization and vegetation will improve Water Quality.
- River bed and banks (M): minor cleanup and improvements at downed cottonwood area on low bench (left bank above lake) to improve aesthetic/remove man-impacted look – leave debris piles.
- Wildlife and fisheries (M): restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Wildlife and fisheries (N): left bank vegetation (woody) and defined access will improve Indian Museum area; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.

Other

- Provide parking for trailhead and river access.
- Consider a future restroom in this area.

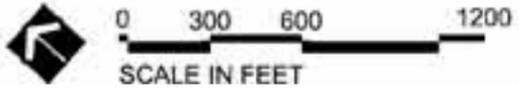
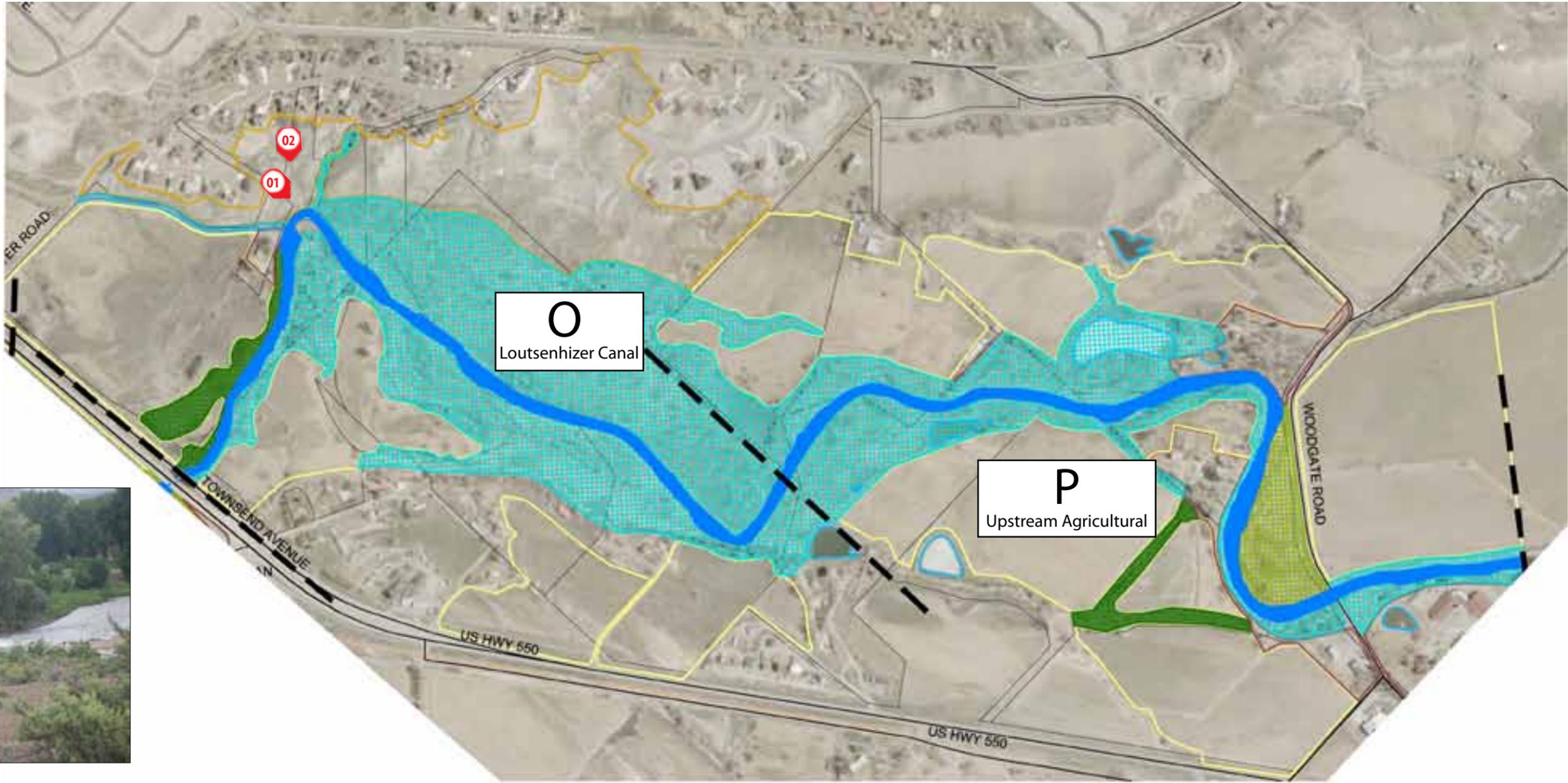


Stacked boulders provide a stable replacement for eroding banks; this example is from the Big Thompson River, Estes Park, Colorado.



LEGEND

 Existing Concrete Trail	 Wetland	 Open Water	 Upland Shrubland
 River	 Riparian Shrubland	 Grassland	 Disturbed
 Creek or Canal	 Riparian Forest	 Turf	
 Existing Park	 Assessment Reach		



Trail Connections

- Connect trail to Otter Road.
- Future trail connection to Ridgway.
- Boat portage around the Loutsenhizer Diversion Dam.

Potential Property to Acquire

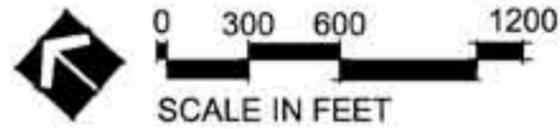
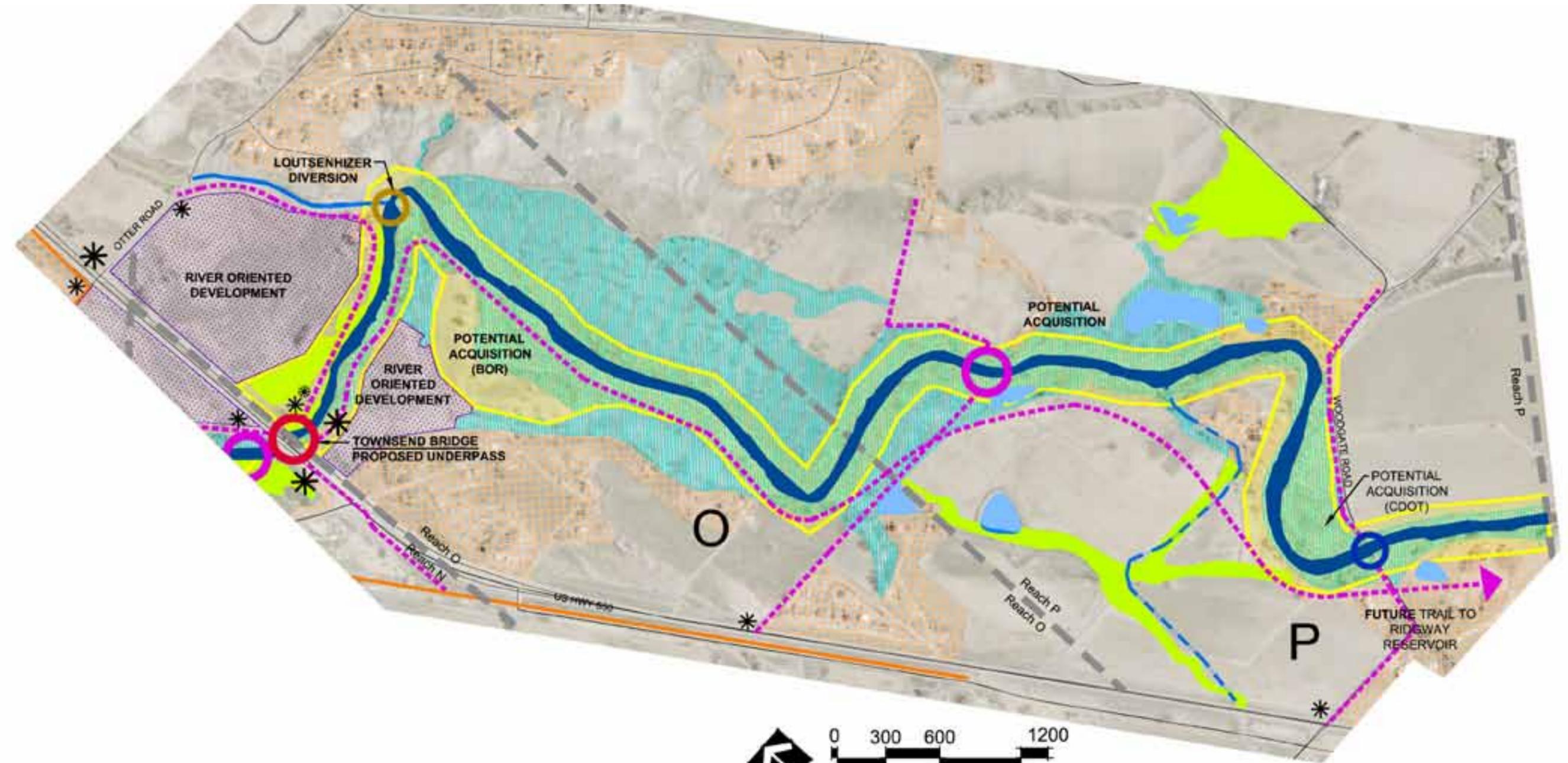
- Bureau of Reclamation (BOR) property, research current wetland mitigation commitments.
- Colorado Department of Transportation (CDOT) property, research current wetland mitigation commitments.
- Preserve riparian habitat, agricultural grasslands, wetland and ponds potentially with a conservation easement.

Ecological Enhancements

- River bed and banks (O): Consider revision to diversion to allow natural channel.
- Overbanks (O): Preserve/conservate buffer, as width currently exceeds 400 feet.
- Wildlife and fisheries (O): Consider fish ladder; restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.
- Water quality (O): Wider multiple strata, vegetated buffer will assist in filtering agricultural and development runoff.
- Wildlife and fisheries (P): restoration of riparian canopy close to water's edge would increase woody debris levels in channel for instream habitat improvement.

Other

- Coordinate with future improvements to the Loutsenhizer Diversion structure to allow for improved boating and fish passage.



LEGEND

Existing Concrete Trail	Wetland	Proposed Trail Connection	Proposed Pedestrian Crossing	Monument Signage
River	Riparian Vegetation	100-year Floodplain	Other Improvements	Directional Signage
Creek or Canal	Disturbed	Potential Acquisition	Proposed Underpass	Interpretive Signage
Existing Park	Open Water	Proposed River Access		
	River Oriented Development			

