



How Do Beautiful Streams in our Mountain Communities Get Classified as “Impaired”?

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Headwater Streams with Portions listed for Aquatic Life Impairment

Blue River

Swan River

Soda Creek

Black Gore Creek

Lake Creek

Beaver Creek

Red Sandstone Creek

Gore Creek

Eagle River

West Sopris Creek

Roaring Fork River

S. Fork Frying Pan River

Colorado River

Fraser River

Vasquez Creek

Colorado Stream Standards & Classifications

Stream Segments

Classified Uses

- **Water Supply**
- **Recreation**
- **Aquatic Life**

Water Quality Standards (TVS)

- **Protective of Classified Uses**
- **Numeric and Narrative**
- **Developed by USEPA/CDPHE**
- **Basic standards, then Basin standards, then discharge permits**
- **Not “Self-Implementing”**

Alternative – Site-Specific Standards

- **Requires UAA**



WQCC Policy 10-1

Multi Metric Index (MMI) – Biological basis for measuring Aquatic Life Use Impairment

- Established a biological assessment protocol for macroinvertebrate assemblages.
- Bugs then grouped into metrics representing community functions like pollution tolerance, habitat composition, feeding group, etc. and combined into the MMI.
- Metric score then compared to numeric threshold criteria to assess the biological condition of the stream.
- Attaining, Impaired, or “Grey Area”



Stream Standard Exceedances

Designated Use “Impaired”

- Public Rulemaking every 2 years
- 303(d) List of Impaired Waters, Regulation 93 (5 CCR 1002-93)

TMDL Required

- Determination of pollution reduction necessary to comply with WQ Standard.
- Point Source discharges and Nonpoint Sources.



Implications of TMDL

- CPDES Discharge Permits
- 319 Funds and other Assistance
- STIGMA as Impaired

How do you get off the 303(d) List?

- Attain the WQ Standard
- Change the WQ standard



Get off the 303(d) list

Example - Restore The Gore – Town of Vail

- Gore Creek 303(d) list for Aquatic Life Impairment in 2012
- Council adopts Strategic Plan
 - Reduce pollutants from nonpoint sources
 - Disrupt pathways that carry pollutants to Gore Creek
- 27 of 219 Actions to improve Gore Creek in Phase 1

Categories of Actions

- Rules and Regulations,
- Best Management Practices,
- Education and Outreach,
- Site Specific Projects, and
- Data Collection and Outreach.



Streambank Stabilization and Revegetation

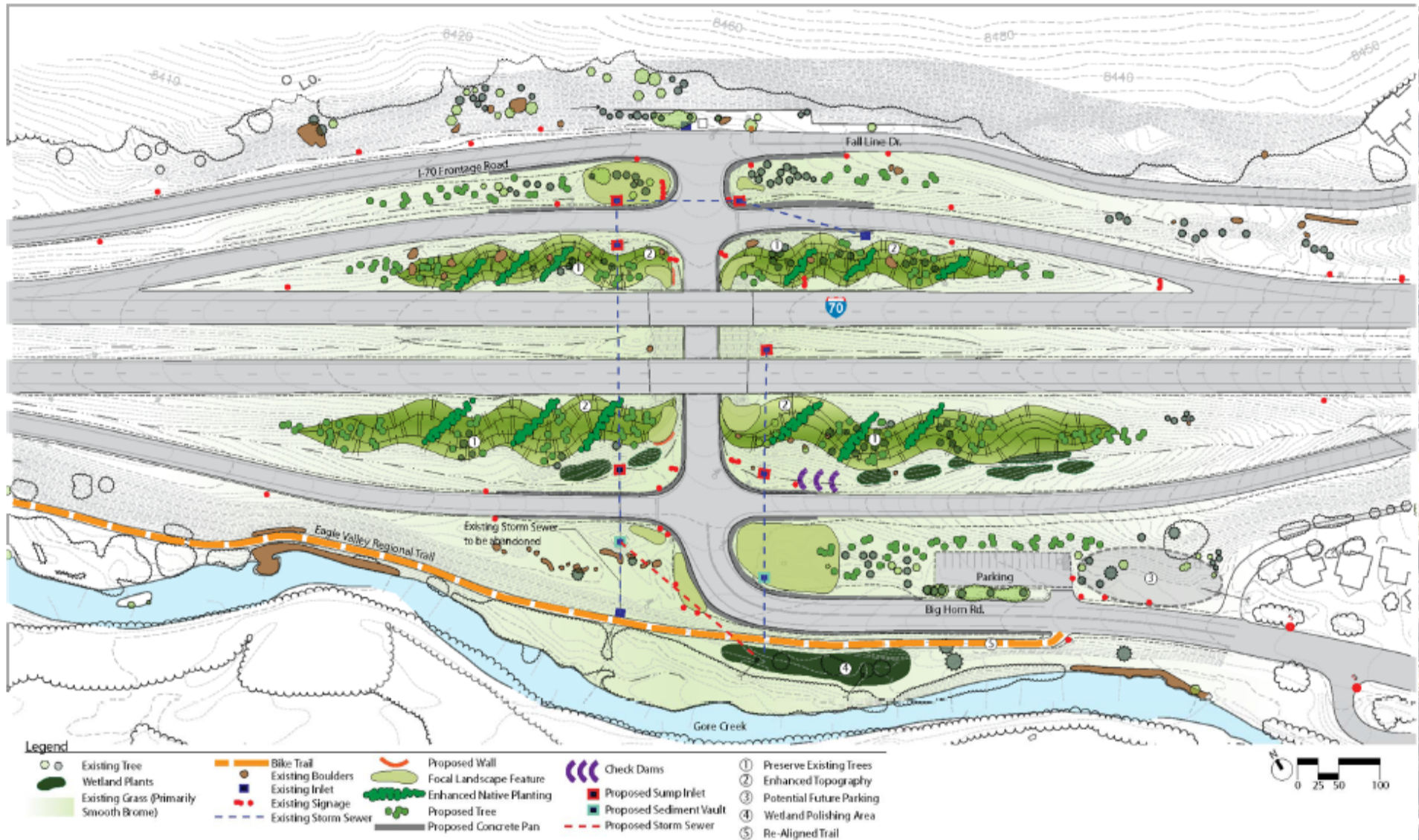


Streambank Stabilization and Revegetation



Water Quality Treatment

Figure 16 – Exit 180 Water Quality Flow Diagram



Exit 180 Water Quality Flow Diagram
I-70 E Vail Landscape and Water Quality Improvements

JULY 2016

Public Education and Outreach



Vail is quite possibly the perfect ski resort, but all that perfection comes with a cost. We treat our roads with chemicals and we use pesticides and fertilizer to keep everything green. As a result, Gore Creek is feeling the impact that comes with turning a mountain into a major attraction. Thankfully, a little wild can go a long way.

To keep Gore Creek healthy, don't mow right to the edge of the creek, use weed killers and fertilizer sparingly, and plant native species on your property. That way, the creek will remain a healthy place for moose, trout, and all the other wild things.

Find out more at www.lovevail.org/gorecreek

RESTORE THE GORE



Questions

