



Photo Credit: Jerzy Szwach, Shutterstock.com

Introduction

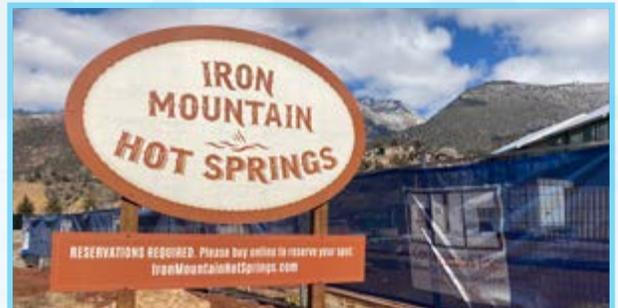
One of the first places in the United States to have electric light¹ was the small town of Glenwood Springs, located in the western part of Colorado. Today, Glenwood Springs is best known as a historic year-round mountain destination with multiple hot springs². This vibrant town is at the Roaring Fork River and Colorado River's confluence which continues to pull visitors from around the world. Protecting this natural beauty and environment are paramount, and those goals require standard protections from potential stormwater hazards.

Goals

A new development connecting the south end of Iron Mountain Hot Springs discovered a few site challenges. Corrosive soils were found, meaning any submerged concrete structures would need an additive mixed in with the concrete. Site-generated pollutants such as TSS, trash, and debris are also a concern, and treatment devices will need approval and meet Glenwood Springs' stormwater requirements.

Solution

Hydrodynamic separators are designed to separate pollutants from stormwater, preventing trash (large plastics and even small particles) and sediments from reaching sensitive water bodies. However, not all separators can be efficiently implemented into a site design. This stormwater separator met or exceeded every goal the design engineer and the city required. As an added bonus, the SciClone Separator is available with shorter lead times.



Stormwater Goals:

- Meet challenging soil conditions with resilient concrete options.
- Implement systems into site drainage design.
- Remove substantial sediment loads from stormwater runoff.
- Control of high flows expected during large volume storm events.
- Quick design, delivery and installation.



Step 1: Installing base section.



Step 2: Lift and place middle riser.



Step 3: Place top slab with access holes.

In collaboration with the design engineer, Boundaries Unlimited, a 10' SciClone Separator was chosen. The SciClone Separator is a cost-effective hydrodynamic separator, allowing for high TSS removal, internal bypass, and an efficient way to capture and retain free-floating oils, trash and debris.

In addition, Xypex, a concrete additive, was easily added to the precast structure to serve as protection from the corrosive soils. This 10' SciClone, installed by CUC Construction, was sized for the high flows typically seen here in Glenwood Springs, while peak flows are controlled with SciClone's internal bypass.

Conclusion

Glenwood Springs represents a destination rich with history and natural beauty. Bio Clean is proud to provide efficient stormwater treatment, engineered to meet unique site challenges, and address trash, TSS, and debris; before it contaminates the Roaring Fork River and Colorado River.

REFERENCES

1. Wikipedia Website
https://en.wikipedia.org/wiki/Glenwood_Springs,_Colorado
2. Visit Glenwood Website
<https://visitglenwood.com/area-info/>

SYSTEM ADVANTAGES

<p>SciClone® Separator</p> 	<ul style="list-style-type: none"> <li data-bbox="602 590 1494 667">  Effective at removing floatables, trash, and hydrocarbons <li data-bbox="602 667 1494 745">  Made in the USA <li data-bbox="602 745 1494 823">  100% Noncorrosive internal components <li data-bbox="602 823 1494 900">  Independently tested by a third party laboratory <li data-bbox="602 900 1494 1045">  NJCAT Verified and NJDEP Certified The SciClone Separator has received both NJCAT Verification and NJDEP Certification <li data-bbox="602 1045 1494 1159">  Performance 80% Removal of TSS 99% Removal of Oils & Grease
---	---