Flowing through one of Colorado Springs’ premier golf courses, Pine Creek had degraded from upstream development and major flooding. The City of Colorado Springs turned to the HDR team to restore the natural channel and stream system, preserve vegetation, and provide bank stabilization to protect surrounding development from catastrophic floods.

Using natural elements to strengthen the creek’s banks — a first in Colorado Springs — the team restored and stabilized 1,750 linear feet of the creek. Beautified with four acres of natural vegetation and funded by a Federal Emergency Management Agency Pre-Disaster Mitigation grant, the project serves as a basis of design and proof-of-concept for phase two, located just downstream from the project.

Constructed at the same time as a city-funded pond upstream for water detention and discharge control, the revitalized creek will create additional aquatic habitat, improve water quality, and reduce the sediment load by 99%, reducing the need to dredge downstream waterways.

Overcoming project delays, public involvement concerns, and constructing during Colorado’s intense monsoon season, the project team used vertical and lateral grade protections as fail-safe measures against flooding while natural, repurposed elements beautify the environment.

Completed on time and on budget, the project removed the threat of structural damage with an environmentally friendly design. The natural stream corridor builds resilience for future events by restoring floodplain connectivity and predevelopment hydrology.