

Shea,

The following is a summary of the October 28, 2010 field meeting in Commerce City and Thornton. The purpose of the meeting was to investigate potential locations for an outfall for the Irondale Gulch Watershed. The meeting was attended by Shea Thomas, Ken Mackenzie, Pete Brezall, Walt Jenkins, Rich Ommert, and Amy Cornelius.

The group investigated many areas that are potential locations for conveyance of the Irondale Gulch flows through Commerce City as well as outfall locations on the South Platte River. Please see the following figure to reference numerical locations.

- Location (1): This was the starting part and the group discussed the culverts that serve as an interconnect under 88<sup>th</sup> Avenue at this location. Walt and Pete explained how the lake was connected to Tigers Lake to the north and elaborated on the pump that brings water back to the south.
  - There is a gas line running down the entire length of 88<sup>th</sup> Avenue.
- Location (2): Next Bull Seep was investigated. On the south side of the street it was observed that there is positive drainage coming into the inlet side there and going through the culvert under 88<sup>th</sup> Avenue.
  - There is a gas line crossing 88<sup>th</sup> Avenue near here, just east of the Bull Seep.
- Location (3): On the north side of the street, in the Bull Seep flow is conveyed to the north. There is another culvert entering the seep from the northwest, and the channel appears to be full.
  - It was also discussed that the property to the west is for sale, and that acquiring this land to route runoff through the property should be explored as a potential alternative. There might also be room for detention.
  - Some of the residential properties in this area experience issues with groundwater in their basement.
- Location (4): This is where Bull Seep crosses Fish Hatchery Road. There are also utilities crossing the Bull Seep at Fish Hatchery Road. This crossing could be an issue if runoff is routed down this road. It might have to be an above ground crossing to preserve the slope of the pipe and due to the lack of grade in this area. Also, to the north of this location, there had been problems with excessive groundwater.
  - Another potential issue with running a pipe down Fish Hatchery Road is that there are slurry walls around Tigers Lake. However it appears that there is enough space for a pipe while still avoiding the walls depending on the depth.
  - To the north of this location, there is a berm on the east of Bull Seep where ground water was accumulating until pumps were installed.
- Location (5): This is one of the most likely locations for an outfall to the SPR. It is downstream of an existing drop structure, thus there is a significant drop in water surface elevation of the South Platte River just upstream of this potential outfall location. This gives us extra fall to work with while attempting to design drainage infrastructure with a positive slope in this very flat area. At the time of the field visit, the vertical drop was approximately 15-feet. There is sufficient ROW in this area for an outfall.
- Location (6): We looked at a recently built detention basin at the corner of Dahlia Street and 88<sup>th</sup> Avenue. The possibility of an outfall into the Dahlia outfall (northwest of the detention basin across the intersection) was discussed.

Please contact me with any questions concerning these notes.

Best Regards,  
Amy Cornelius