# 72” RCP Dam Outfall Pipe Repair

Gainesville, GA

## Project Challenges
- 72” RCP dam outfall pipe had water flowing along the outside of the pipe and entering the weak pipe joints
- Customer did not want to remove / replace the RCP because was in good condition
- Customer tried cementious grout to seal joints and failed (see cementious grout attempt in pipe haunch of picture on right)

## Solution
- Stabilize and densify surrounding soils, creating a non-permeable layer to stop water movement by use of Deep Injection of high density polyurethane
- Inject the Uretek 486 material to seal the leaking joints
- Injections made at 5 & 7 o’clock positions of the pipe

## Support
- Uretek designed the injection process using a hydrophobic 2 part Star 486 HDP material
- We were able to fix the joints from inside the pipe and did not need to close the road

## Outcome
- **Quick Installation:** Project took 6 hours compared to 4 days to remove and relay the RCP (would not have needed to replace).
- **Cost Effective:** Project was more cost effective than remove/relay and bringing in additional fill material. Also, slip lining was not a viable option since the water was coming from the outside of the pipe.