



# A View from the Canals:

## Canals can leak, Sometimes drastically

Craig Simpson, P.E., Secretary-Manager  
East Columbia Basin Irrigation District



# EL 35.6 Mile Breach



- ▷ Canal failed June 16<sup>th</sup>, 1992
- ▷ Water piping along undershot





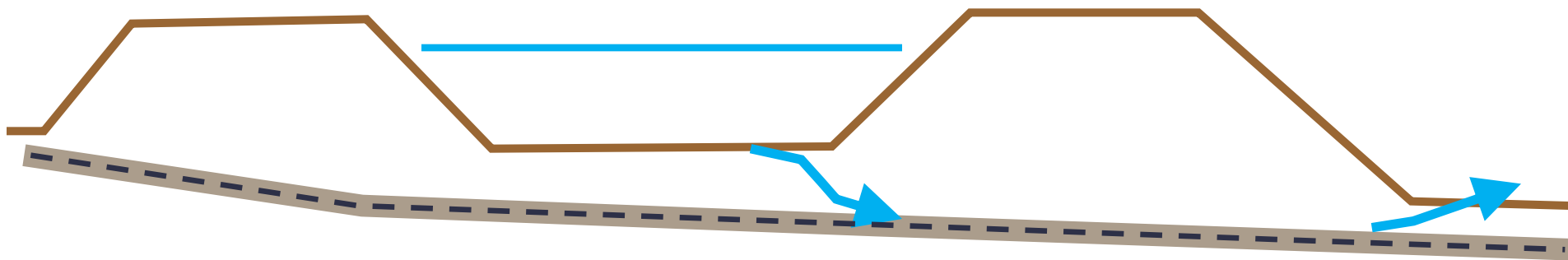
# EL 52 Mile Leak



- ▷ Leak detected early April 2008
- ▷ Caused by an ungrouted void around the casing of a utility bore under the canal



# EL 52 Mile Leak



Seepage Along Utility Crossing



# EL 26 Mile Breach



- ▷ August 5<sup>th</sup> 2024
- ▷ Reported by landowner at 8:30 PM
- ▷ 3,100 CFS







# Dewatering Site Assessment

- ▷ Formulate a plan to repair
- ▷ Stage equipment
- ▷ Board declared the break an emergency





# Challenges in Dewatering

- ▷ Failure occurred near an undershot
- ▷ To the East (high side)







# Limiting Backflow

- ▷ Constructed dikes to control backflow
- ▷ Ground water
- ▷ Pumped water







# Downstream Impact

- ▷ Impact limited compared to 1992 break
- ▷ Relatively minimal flooding





# Rebuilding Core Bank

- ▷ Hauled in material
- ▷ Compaction, compaction, compaction







# Protecting the Embankment

- ▷ Temporary solution
- ▷ Secured a geomembrane liner







# Rapid Canal Refill Effort

- ▷ Total downtime: 4 days, 3 hours
- ▷ Began refilling Friday night
- ▷ Started making deliveries Saturday



# Operational Considerations

- ▷ USBR dewatered and reprimed quickly
- ▷ Held elevations in unaffected reaches
- ▷ Dikes retained water for quicker priming
- ▷ Greatly benefitted repriming efforts
- ▷ Some dewatering damage to repair

# Thank You!

- ▷ Appreciate landowners' patience
- ▷ Local businesses provided assistance
- ▷ Landowner equipment
- ▷ SCBID pumps
- ▷ QCBID liner
- ▷ Reclamation's ops coordination
- ▷ District Board and staff



# Conclusion

**Any questions?**

Craig Simpson, P.E.  
Secretary-Manager  
East Columbia Basin Irrigation District  
[csimpson@ecbid.org](mailto:csimpson@ecbid.org)  
509-488-9671

