How does saltwater intrusion impact the water sector?



Surficial Sources

- River reverse flows increased length/frequency moving upstream (surficial sources)
 - Decreased discharge (overall volume, base flow)
 - Increased tide elevation (SLR sea level rise)



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- Wells and Groundwater
 - (bottom-up contamination)
 - Head change due to SLR along the coast
 - Decreased recharge (rain pattern, ET, development) dilution
 - Upconing from pumping with rising demand

- forcing inland
- allowing to rise up/decreased
- pulling up



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 - Head change due to SLR along the coast
 - Decreased recharge (rain pattern, ET, development)
 - Upconing from pumping with rising demand
 - (top-down contamination)
 - Coastal flooding *increased depth/frequency*
 - Storm surge
 - Tide related

- forcing inland
- allowing to rise up/decreased dilution
- pulling up

-entering wells from above (groundwater)

Localized Impacts

Google Earth

Imagery Date: 2/7/2020 29°18'05.91" N 83°05'39.86" W elev 5 ft eye alt 1206 ft 🔘

Intrusion + Development

Pine Island

Google Earth

Imagery Date: 2/25/2021 30°03'29.75" N 81°22'41.58" W elev 1 ft eye alt 7695 ft 🔘

Polomato River

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