

Exercise: Setting a Minimum Threshold

Directions:

- You are a GSA board member
- Your basin has a problem with seawater intrusion
- Currently, you have a salt concentration of 350 parts per million (ppm)
- State law establishes a maximum contaminant level for salt at 500 ppm to ensure safe drinking water
- Some crops are sensitive to salt at lower thresholds
- You must choose a minimum threshold for salt

Background:

You live in a coastal, agricultural basin that is experiencing seawater intrusion. On January 1, 2015 groundwater had a salt concentration of 350 ppm. The Coastal Basin GSA is developing its GSP through an open, public process and is examining 3 possible minimum thresholds for seawater intrusion.

You should negotiate and could choose one of the 3 thresholds listed below or make up your own. Whatever minimum threshold you choose must be adopted by a majority vote of the board members. At the end of the exercise, you will explain the rationale for your choice to the public (the other groups).

Minimum threshold A: 500 ppm

This would allow continued seawater intrusion at current rates but would commit to limiting seawater intrusion beyond the state-defined maximum contaminant level. Least expensive option but negative impacts to crops would increase and would put the basin at risk for violating drinking water standards with any slight increase in salt concentration.

Minimum threshold B: 350 ppm

This would stop seawater intrusion at current levels of salt contamination. Moderately expensive option. Current impacts to certain crops would continue but not worsen.

Minimum threshold C: 300 ppm

This would stop seawater intrusion and require additional management actions to reduce salt contamination. Most expensive option but agricultural conditions would improve..

Roles:

COUNTY SUPERVISOR- You do not support any additional taxes or fees and are advocating for threshold A since it is the least expensive option.

CITY COUNCILOR- You represent cities with nitrate-contaminated groundwater who do not want to risk salt contamination as well and are advocating for threshold B since it is safer than setting the threshold at the legal limit for salt but it is also only moderately expensive.

BERRY FARMER- You are advocating for threshold C to protect berry production.