

# Renewable Grease Use in the Wicket Gates of Dams

## ENVIRONMENTALLY SAFE GREEN LUBRICANTS FOR WICKET GATES

By Leslie J. Hanna and Clifford A. Pugh, Bureau of Reclamation

### Summary of Conclusions:

- Selection of an environmentally safe lubricant should be based both on environmental standards and mechanical performance.
- The lubrication tests indicated that the ester based and canola based lubricants performed significantly better than the petroleum based food grade greases that were tested.
- The percent lubrication (PL) for these two greases was 93 percent and 105 percent respectively, the three petroleum based food grade greases tested the average PL was 55 percent.
- More testing is recommended to ensure that mechanical performance as well as environmental standards are met.

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