## LAKE OROVILLE SPILLWAYS CONSTRUCTION

## Gated Flood Control Spillway Construction Comparisons

November 2018



|                                      | 1968   | 2018   |
|--------------------------------------|--|--|
| Length of<br>main spillway           | 3,055 feet   | 3,055 feet   |
| Width of<br>main spillway            | <b>178.75 feet</b> As wide as a 12-lane freeway with center divider                      | <b>178.75 feet</b> As wide as a 12-lane freeway with center divider                  |
| Flow capacity                        | <b>270,000</b> cubic feet per second   | 270,000<br>cubic feet per second<br>(100,000 cfs from Nov 2017 through January 2019) |
| Spillway Chute<br>Concrete thickness | DESIGN: <b>1 feet, 3 inches</b><br>minimum<br>ACTUAL: <b>2 feet, 8 inches</b><br>average | DESIGN: <b>4 foot, 6 inches</b> minimum  ACTUAL: <b>7 feet, 6 inches</b> average     |
| Spillway wall height                 | <b>20 feet - 27 feet</b> 1 foot thick at the top 2 feet, 4 inches thick at the base      | <b>20 feet - 34 feet</b> 2 feet thick at the top 5 feet thick at the base            |
| Piezometers                          | 0  | 58   |
| Reinforcing steel                    | LAYERS: <b>1</b><br>DIAMETER: <b>5/8 inch</b>  | LAYERS: <b>2</b> (top is epoxy-coated) DIAMETER: <b>1 inch</b>                       |
| Underdrains                          | түре: <b>Clay</b><br>DIAMTER: <b>6 inch</b>  | TYPE: <b>PVC</b> DIAMETER: <b>8 inch</b>   |
| Slab Anchors                         | QUANTITY: <b>Appx. 5,700</b><br>DEPTH: <b>5 feet deep</b>                                | QUANTITY: <b>Appx. 7,000</b> (epoxy-coated)  DEPTH: <b>15 to 25 feet deep</b>        |