

# Orchard Estates Retarding Basin

Monitoring Survey

## Legend

- ▲ Control Stations
- Benchmarks
- Monitoring Stations



Google earth

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600 ft





## **Orchard Estates Retarding Basin (F26B02) Monitoring Survey**

Seven survey monuments were set along the top of levee in 2001. This survey will be used as the "benchmark" for all future surveys.

### **Chart Details**

#### **Horizontal Movement Perpendicular to Dam Axis - shows all data from each year.**

Stations 1+00 and 10+00 are held for ***Out From Line*** calculations.

Positive numbers represent stations right of line (upstream), negative numbers represent stations left of line (downstream).

#### **Horizontal Movement Along Dam Axis (difference from planned stationing) - shows all data from each year.**

Station 1+00 is held for stationing calculations.

Positive numbers mean that the distances measured to each station are greater than planned stationing, negative number means less than planned stationing.

#### **Vertical Movement - shows all data from each year.**

Vertical differences are calculated comparing each elevation to the "2001 survey" elevation.

Detailed information pertaining to monument descriptions and survey information can be found at OC Survey Division, Geodetic Control Unit.

All values are shown in U.S. Survey feet.

**Horizontal Datum = CCS83, zone VI, 1991.35 Epoch Adjustment**

**Vertical Datum = NAVD88, OCS 1995 Adjustment**

## **Orchard Estates Retarding Basin (F26B02) Monitoring Survey**

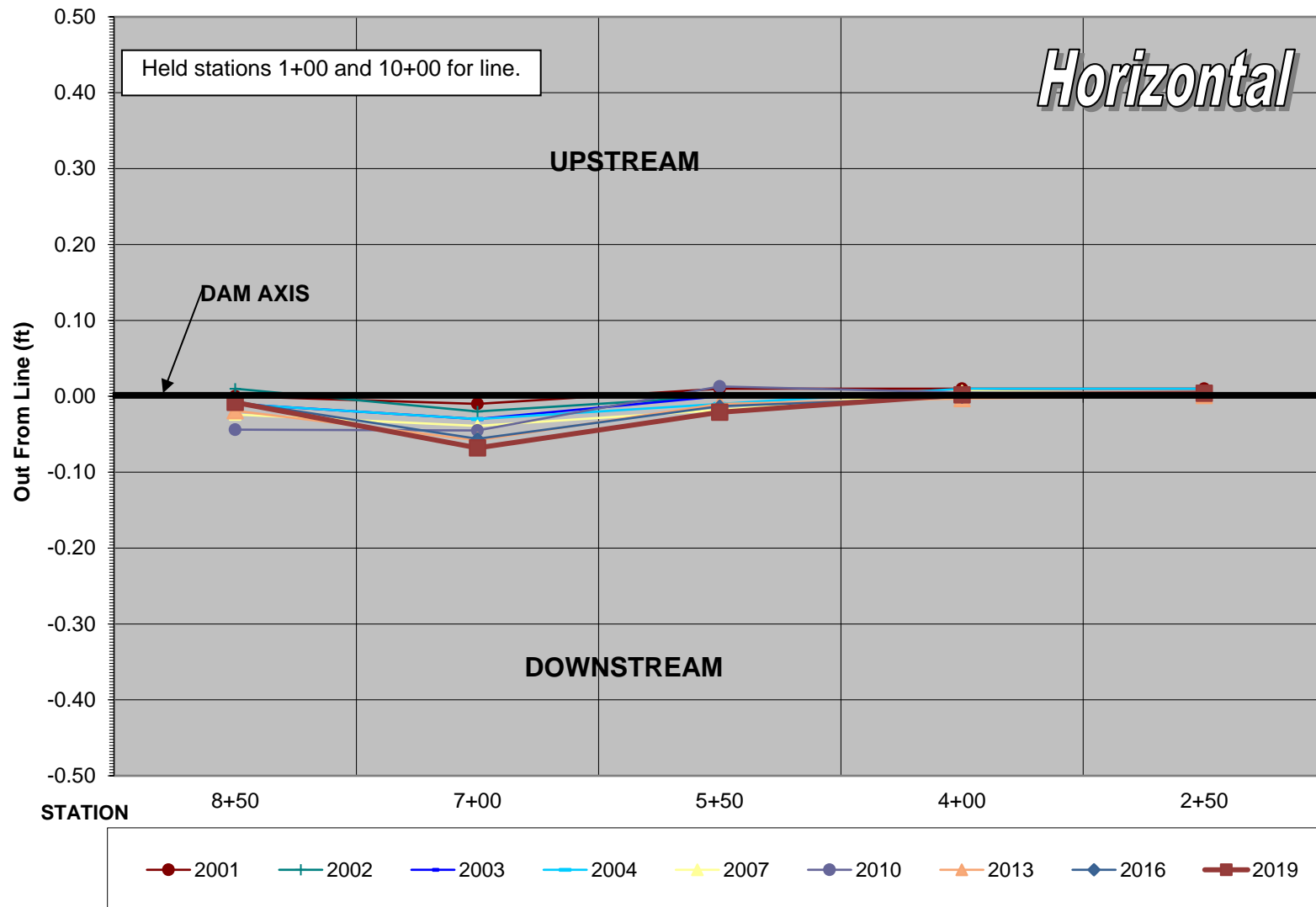
### **Report Summary**

<b>2001</b>	Initial survey performed. Comparisons will begin 2002.
<b>2002</b>	No Significant Movement Detected on dam monitoring points. 2002 height of benchmark "Orchard" located on spillway headwall differs by -0.10' than 2001 height.
<b>2003</b>	Stations 7+00 and 8+50 show gradual settling.
<b>2004</b>	No Significant Movement Detected.
<b>2007</b>	No Significant Movement Detected.
<b>2010</b>	No Significant Movement Detected.
<b>2013</b>	Station 7+00 shows slight horizontal movement downstream. Stations 7+00 and 8+00 show continual vertical settling.
<b>2016</b>	Stations 7+00 and 8+00 show continual vertical settling.
<b>2019</b>	No Significant Movement Detected.
<b>2022</b>	
<b>2015</b>	

Horizontal Datum = CCS83, zone VI, 1991.35 Epoch Adjustment

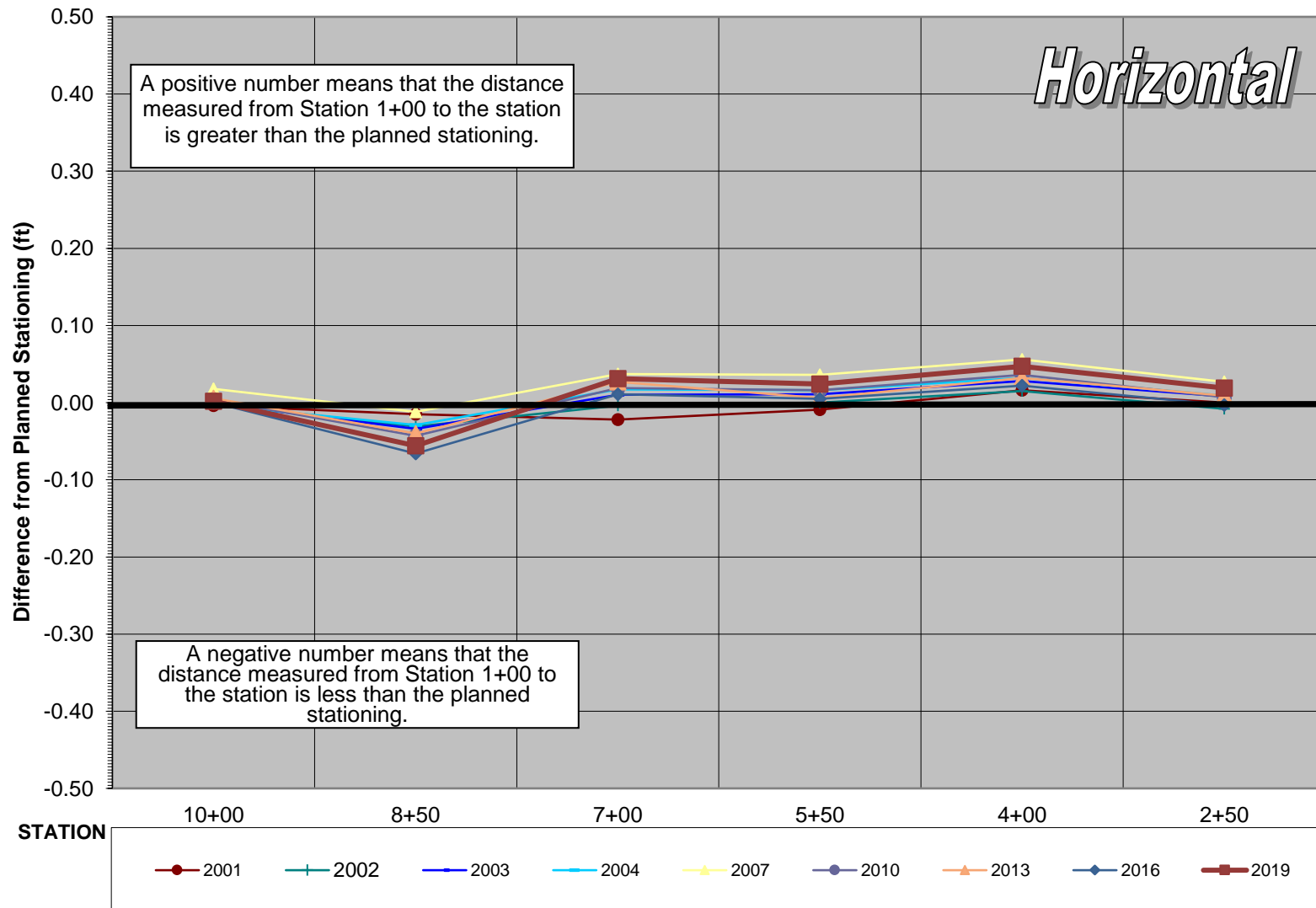
Vertical Datum = NAVD88, OCS 1995 Adjustment

# Horizontal



# Orchard Estates Retarding Basin

## Horizontal Movement Along Dam Axis (Difference from Planned Stationing)



Orchard Estates Retarding Basin  
Vertical Movement (Difference from 2001 Elevations) - Profile View - *Looking Upstream*

