Youghiogheny River Temperature Protocol for Operating Deep Creek Hydro Station: Potential Changes and Effects on Lake Level

March 2019 stakeholder meeting

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1. Continue TERs into September

How many exceedances have occurred after August 31?

- 11 exceedances have occurred in September 2008-2018 (0-3/year)
- 1 in 2008, 2 in 2010, 1 in 2011, 3 in 2015, 1 in 2016, 3 in 2018, averaging 1/year
- 1/3 inch of lake level on average
- 1 inch of lake level for 3 additional releases

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2. Increase flow trigger from 150 cfs to some higher number

How many exceedances have occurred with a baseflow > 150 cfs

- Since 2010, 5 exceedances have occurred with baseflow > 150 cfs and < 200 cfs
- 2010:1; 2013:2; 2017:1; 2018:1
- 1 additional two-hour release = 1/3 inch of lake level
- 2 additional two-hour releases = ~ 2/3 inch of lake level

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3. Change release time for TERs predicted at 1100 to 1100 instead of 1230

- 30% of exceedances from 1995-2018 have been due to the delayed release
- No additional releases are needed for this change, only the timing is changed

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Summary: Lake Level Changes
(assuming no inflow)

Protocol Change	Average	Worst-Case
1. September TERs	0.3 in.	1 in.
2. 200 cfs trigger	0.3 in.	0.7 in.
TOTAL	0.6 in.	1.7 in.

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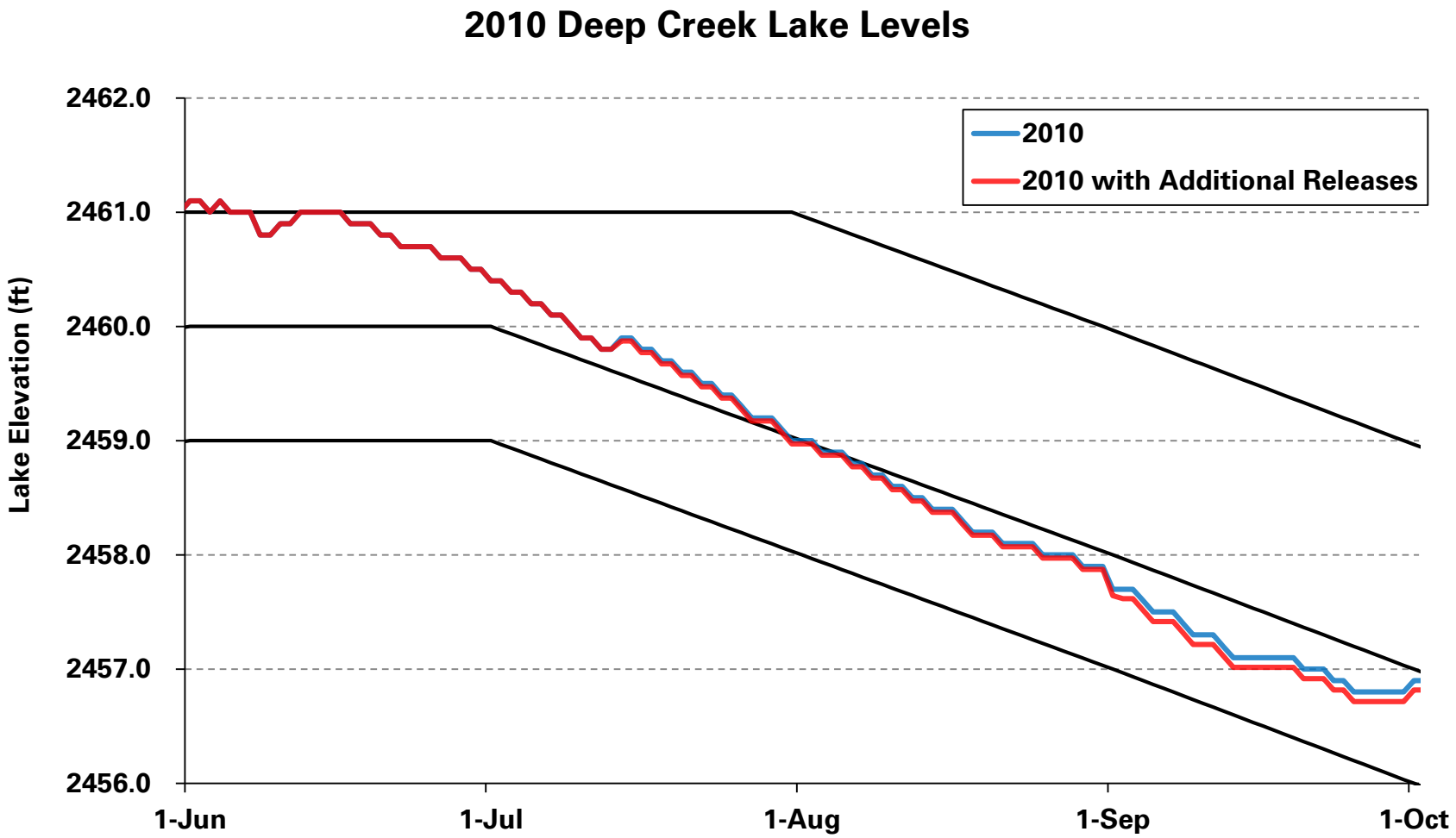

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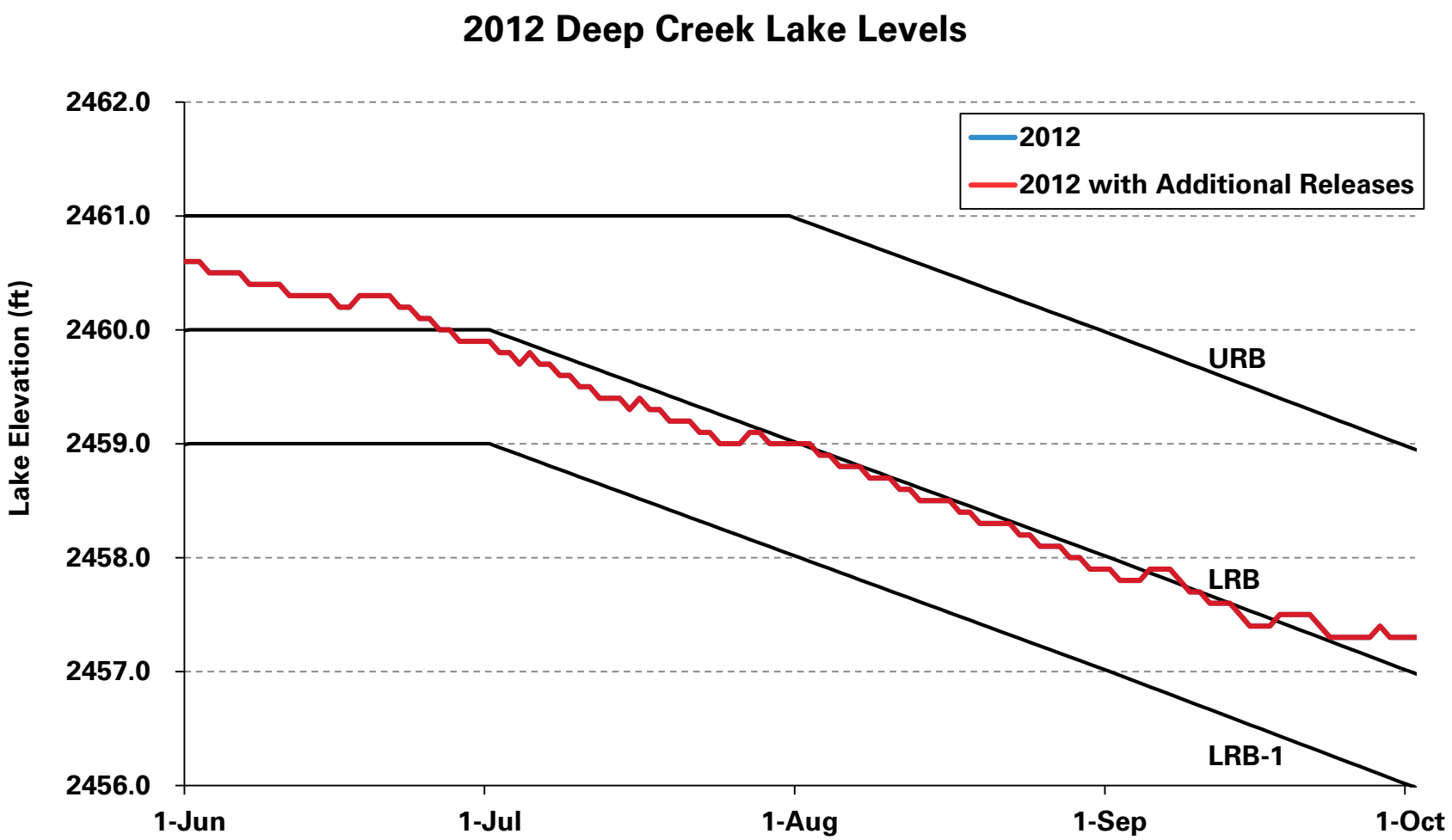

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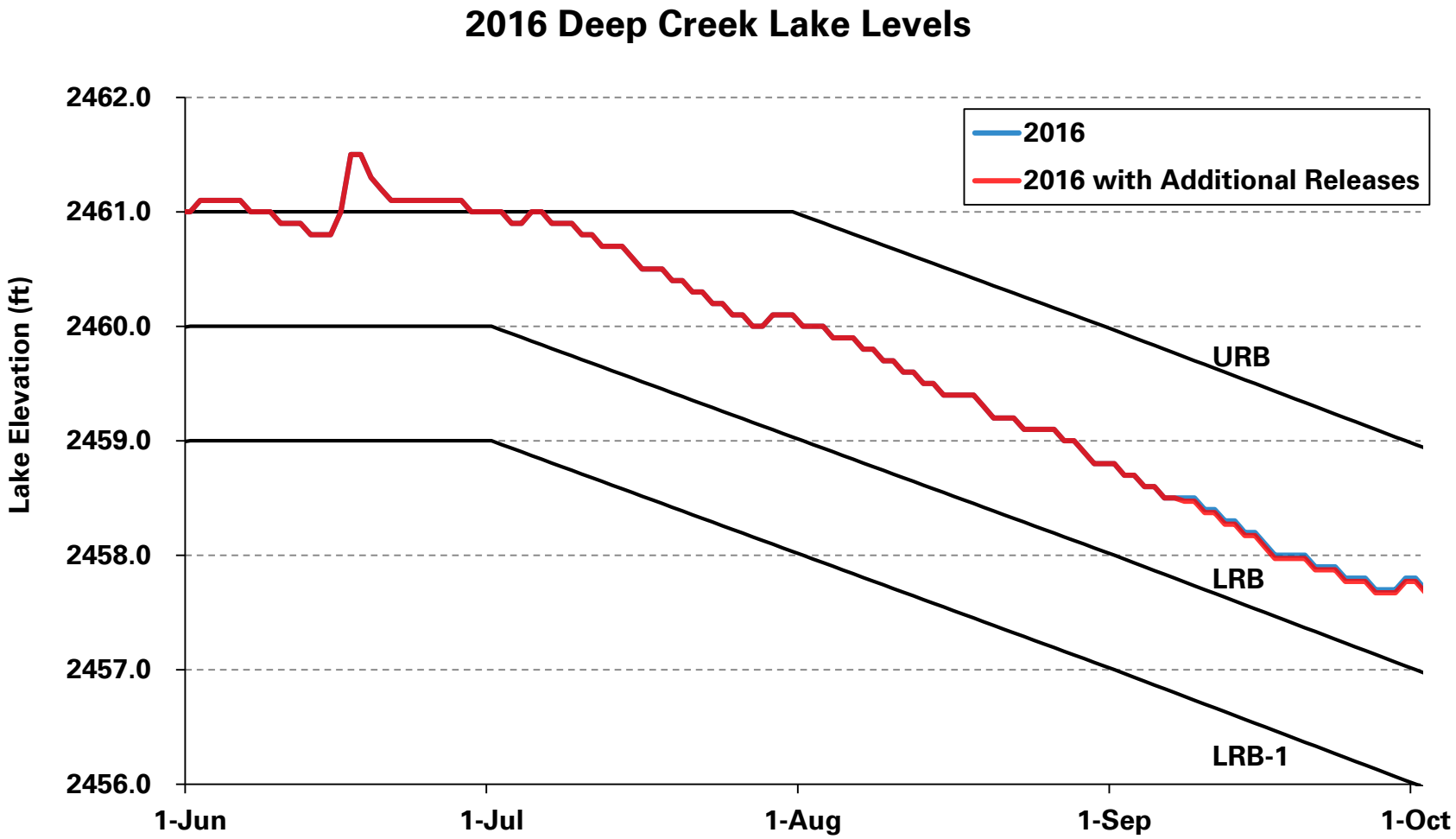

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