

International Kootenay Lake Board of Control

Annual Public Meeting

Bonnars Ferry, Idaho

Presented By:

Colonel Mark Gerald

US Section Chair

Kootenay Lake Board of Control

20 September 2018



Agenda

1. Welcome and Introductions
2. International Joint Commission Context
3. Kootenay Lake Orders
 - a. System Operations 2018
 - b. Kootenay Lake levels 2018
4. Questions and Comments



International Kootenay Lake Board of Control

Canadian Section

Bruno Tassone, Chair
Water Survey of Canada (retired)

Ted White, Member
B.C. Ministry of Forests, Lands, Natural
Resource Operations & Rural Development

U.S. Section

Col. Mark Gerald, Chair
U.S. Army Corps of Engineers

Kyle Blasch, Member
U.S. Geological Survey

Secretariat

Gwyn Graham
Environment & Climate Change Canada

Kevin Shaffer
U.S. Army Corps of Engineers



International Joint Commission

**Lana
Pollack,
U.S.,
Chair**



**Gordon
Walker,
Canada,
Chair**



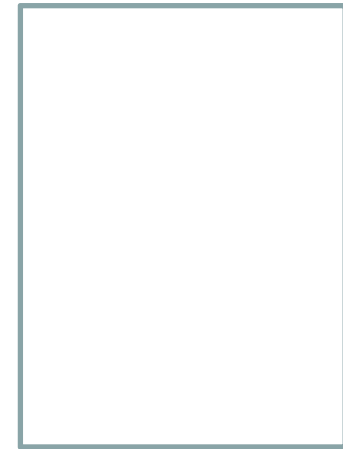
**Rich Moy,
U.S.**



**Vacant,
U.S.**



**Richard Morgan,
Canada**



**Vacant,
Canada**

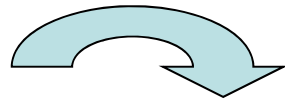


International Joint Commission

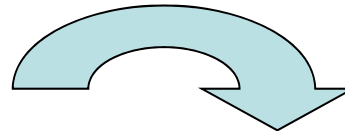


'Boundary Waters Treaty'

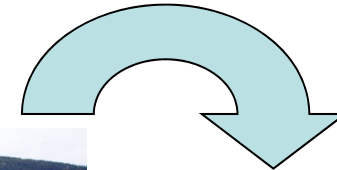
1909 Treaty Between the United States and Great Britain (for Canada) Relating to Boundary Waters, and Questions Arising Between the United States and Canada



International Joint Commission (IJC)



**Corra Linn Dam
IJC Kootenay Lake
Order of Approval**



**International Kootenay
Lake Board of Control**



International Joint Commission

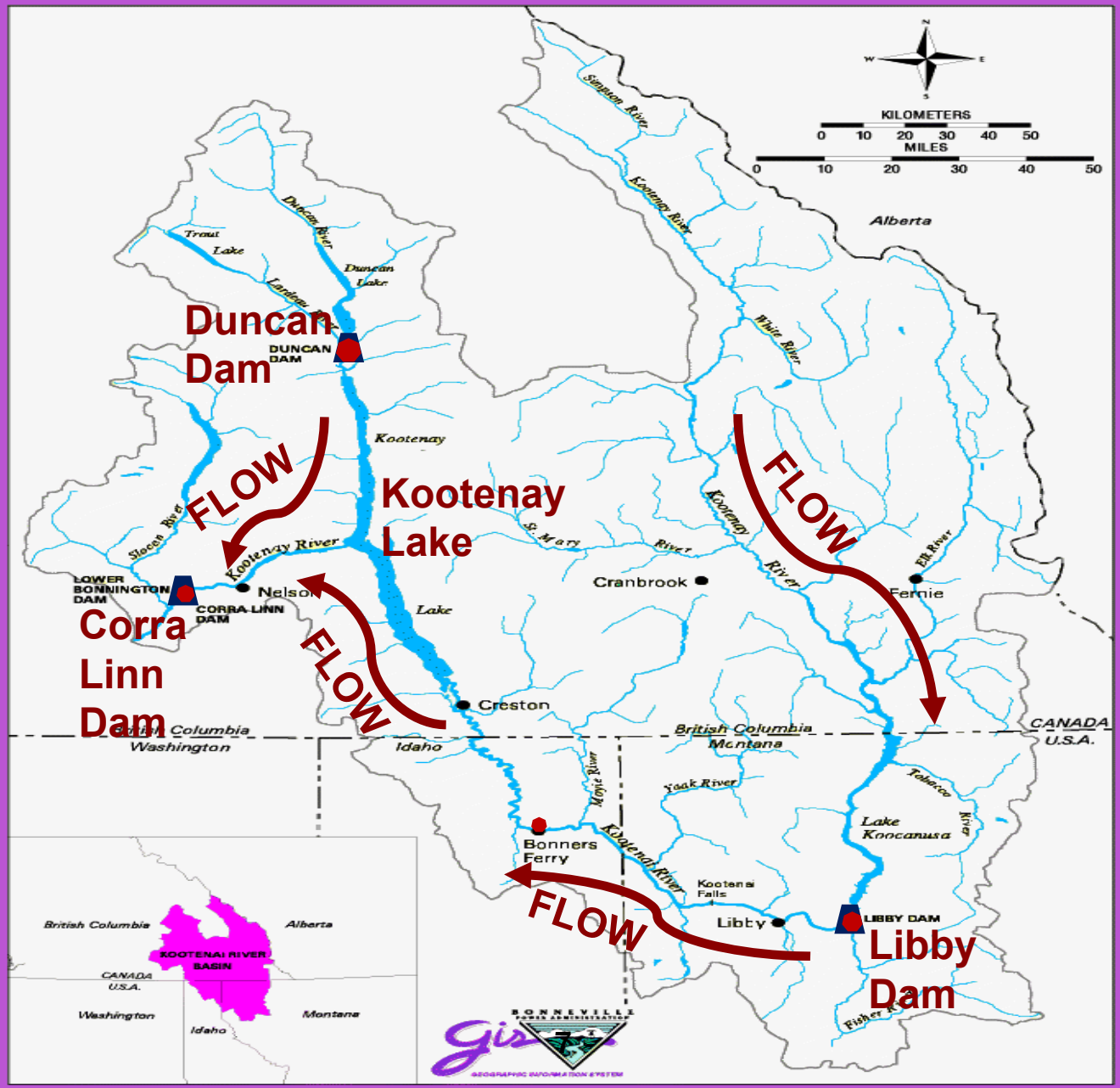
To prevent and resolve Canada/U.S. water issues, the Commission...

1. Receives applications and references on transboundary issues
2. Notifies public, undertakes studies and holds hearings to inform decisions
3. Issues Orders (e.g. 1938 IJC Order for Kootenay Lake)
4. Issues recommendations (for reference cases)

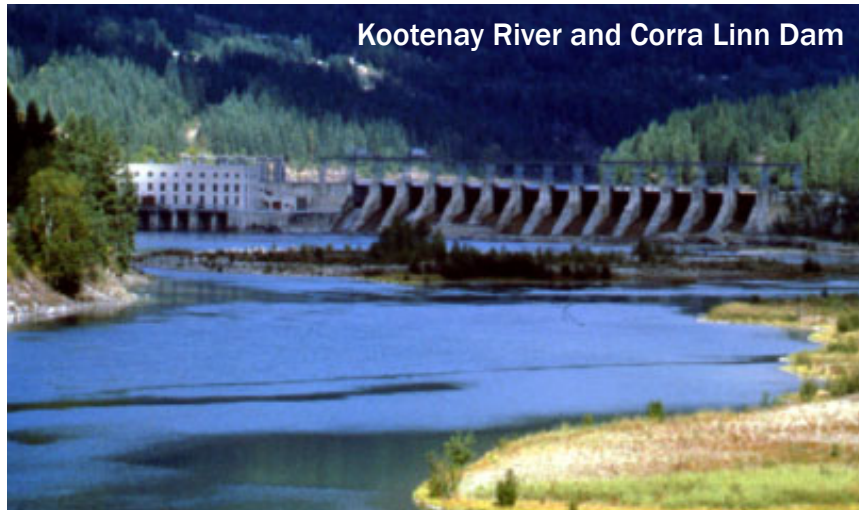
The Commission appoints Boards of Control to monitor compliance with the terms of IJC Orders



Kootenai (Kootenay) Basin



1938 Kootenay Lake Order of Approval



Although Kootenay Lake is in Canada, Corra Linn Dam can affect water levels up the Kootenai River into Idaho

- Therefore, the Boundary Waters Treaty applies

Corra Linn Dam (now owned by FortisBC) and the IJC

- 1929: West Kootenay Power sought IJC approval for Corra Linn Dam and 6 feet of water storage in Kootenay Lake
- 1938: IJC issued the Order of Approval for Corra Linn Dam



International Kootenay Lake Board of Control

Duties of the Kootenay Lake Board of Control...

1. Monitor FortisBC's operation of Corra Linn Dam for compliance with the terms of IJC Order (e.g. [maximum water levels](#) on Kootenay Lake)
2. Assure all other provisions of the 1938 IJC Order are followed
3. Hold annual meetings, report and provide general support to the IJC on issues relating to the 1938 IJC Order



1938 Kootenay Lake Order of Approval

Main Provisions – 1 of 3

Directed FortisBC's predecessor to dredge Grohman Narrows (completed in the early 1940s)



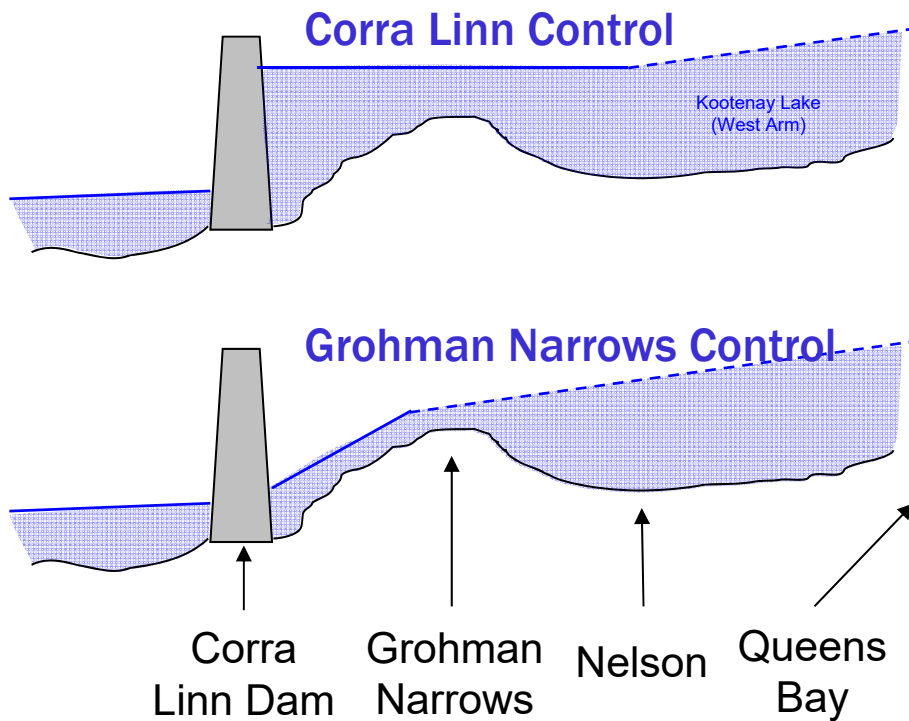
1938 Kootenay Lake Order of Approval

Main Provisions – 2 of 3

Directs FortisBC to take advantage of the dredging to lower the peak water levels on Kootenay Lake



Kootenay Lake Control



1. Lake level depends on balance of inflow and outflow
2. Corra Linn Dam does not have exclusive control of lake outflow
3. When the Corra Linn Dam forebay is kept low, control moves upstream to the channel constriction at Grohman Narrows



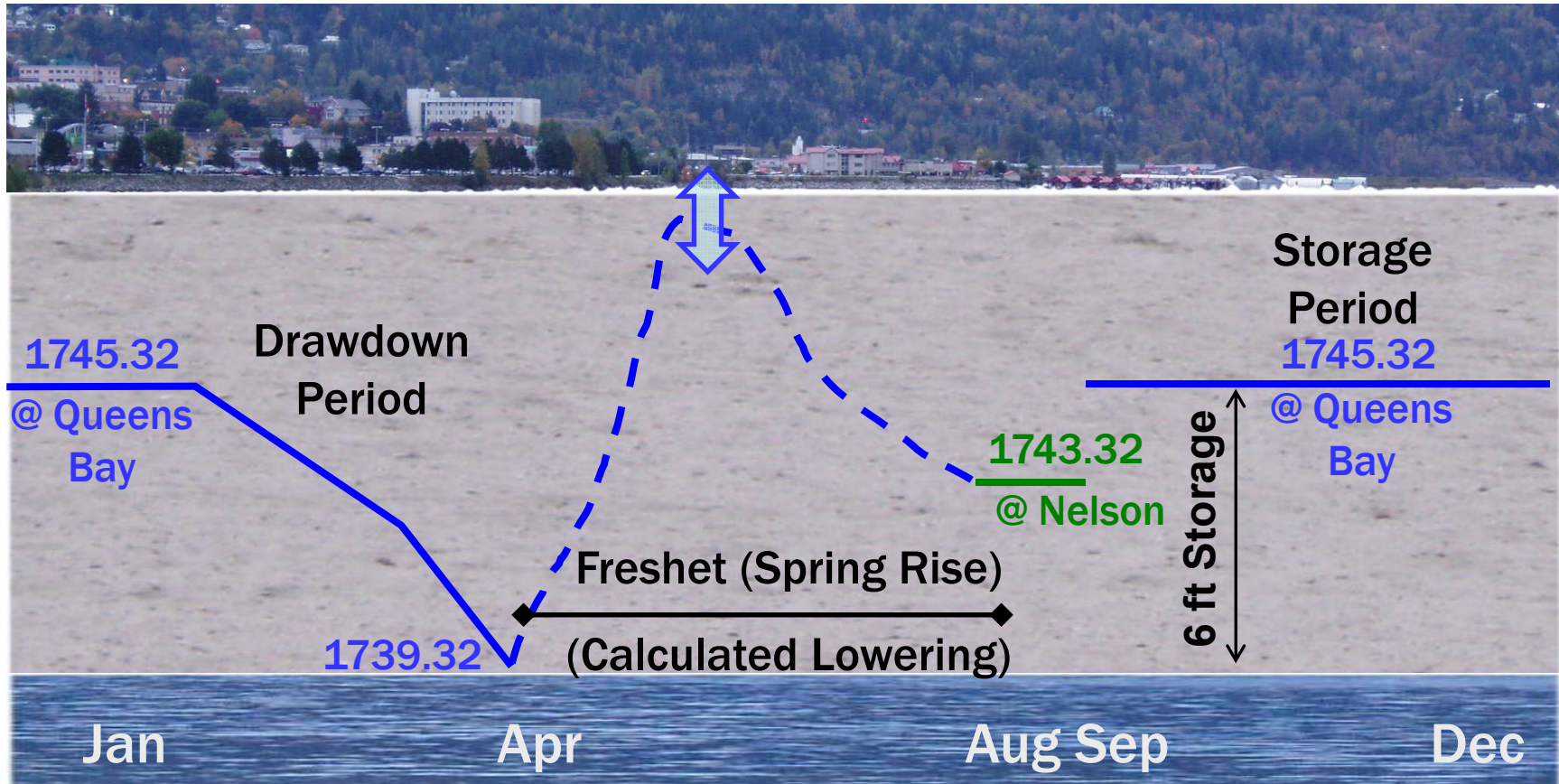
1938 Kootenay Lake Order of Approval

Main Provisions – 3 of 3

Directs FortisBC to pay Idaho farmers to help offset increased pumping costs for land drainage

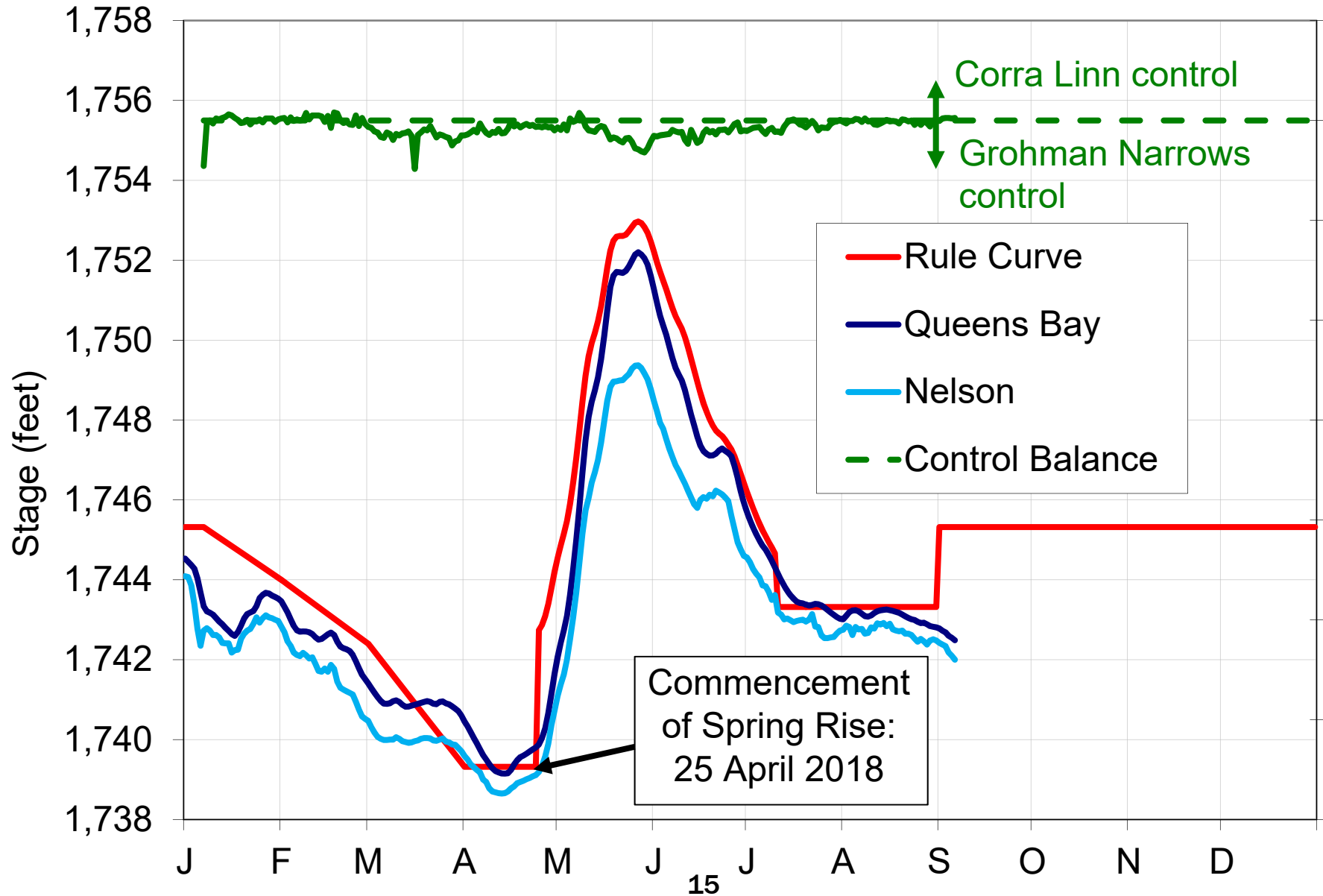


IJC Kootenay Lake Order of Approval Maximum Water Level Conditions

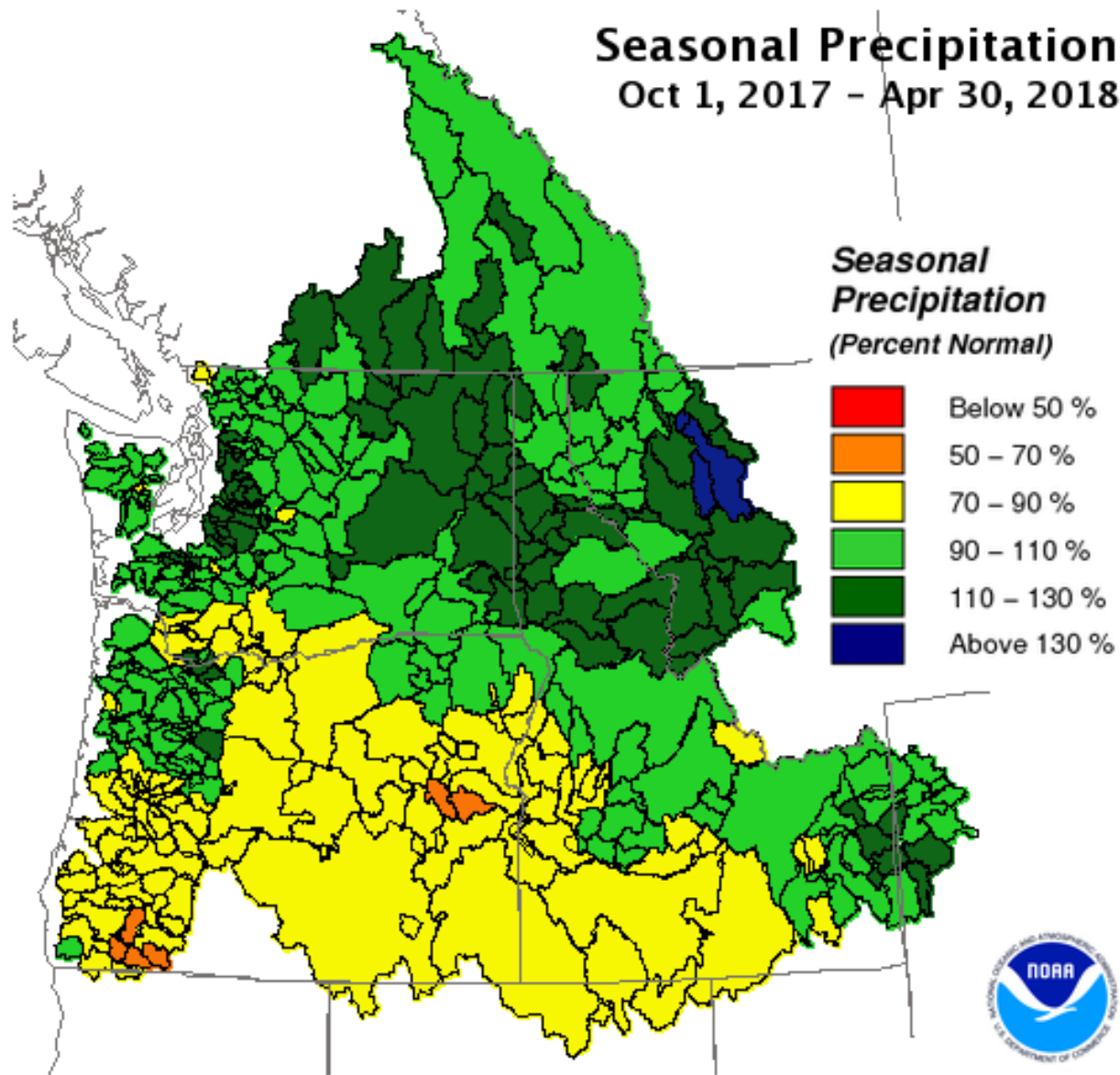


Kootenay Lake in 2018

Conditions to Date



Seasonal Precipitation Oct 1, 2017 - Apr 30, 2018



Creation Time: Tuesday, May 1, 2018

Northwest River Forecast Center

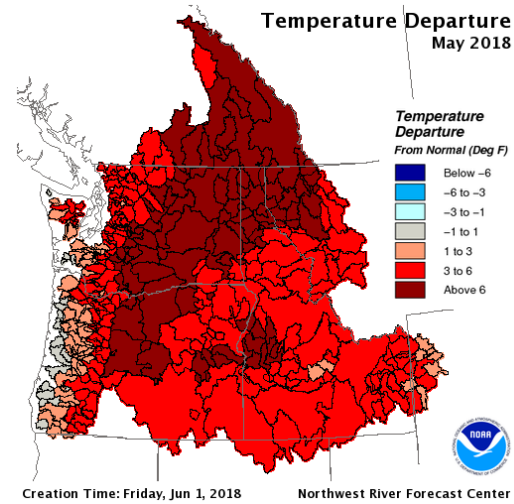
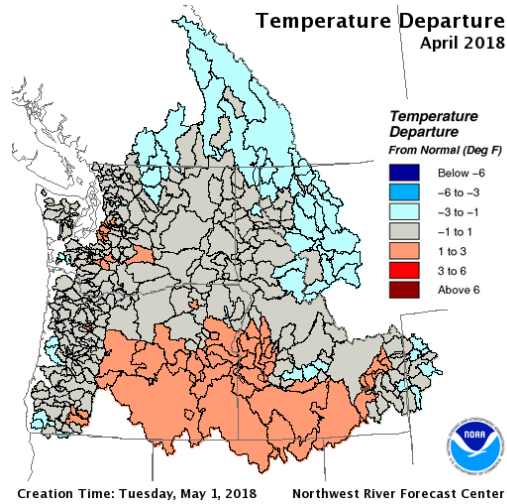


2018 Flooding Concerns

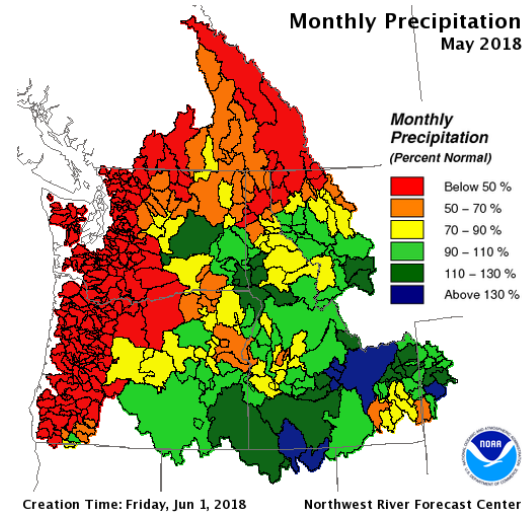
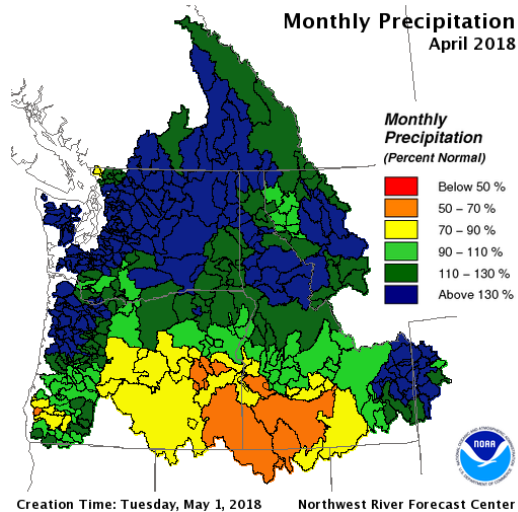
April

May

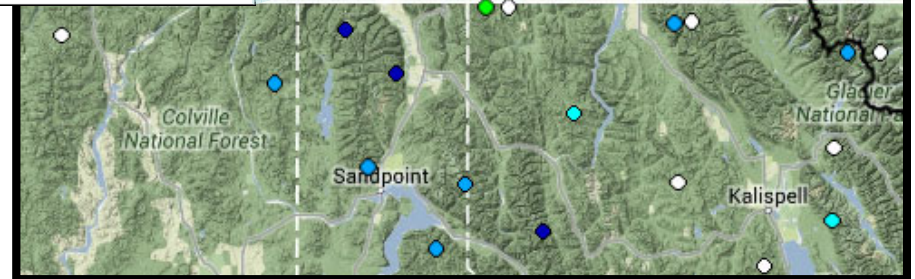
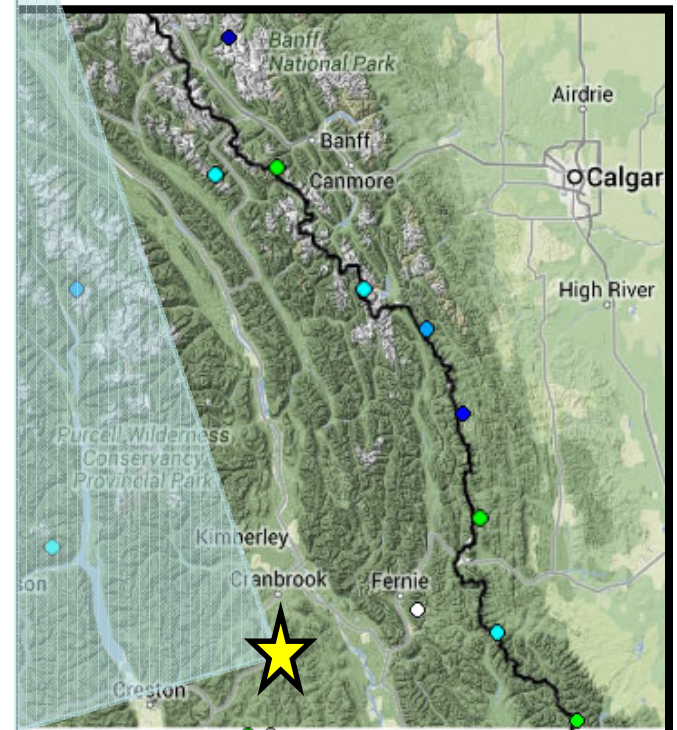
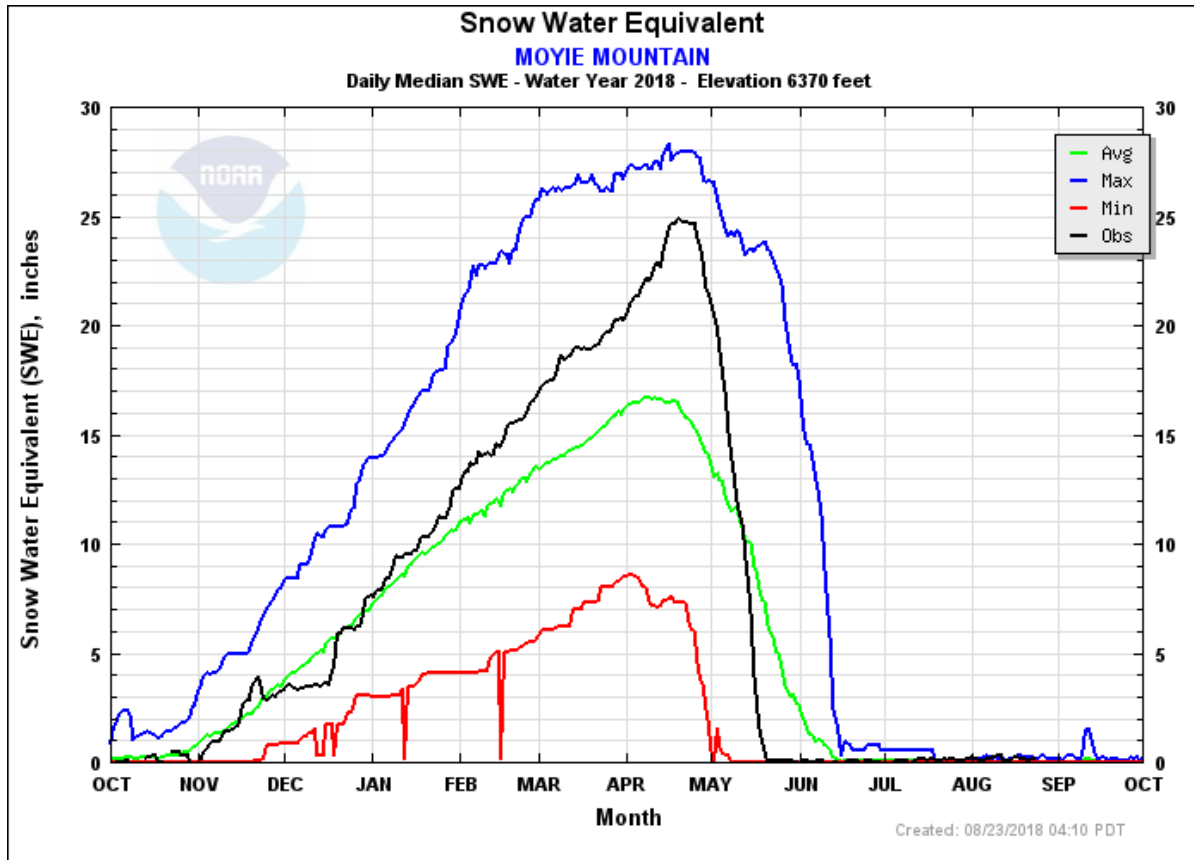
- Temperature
- Cool April
 - Warm May



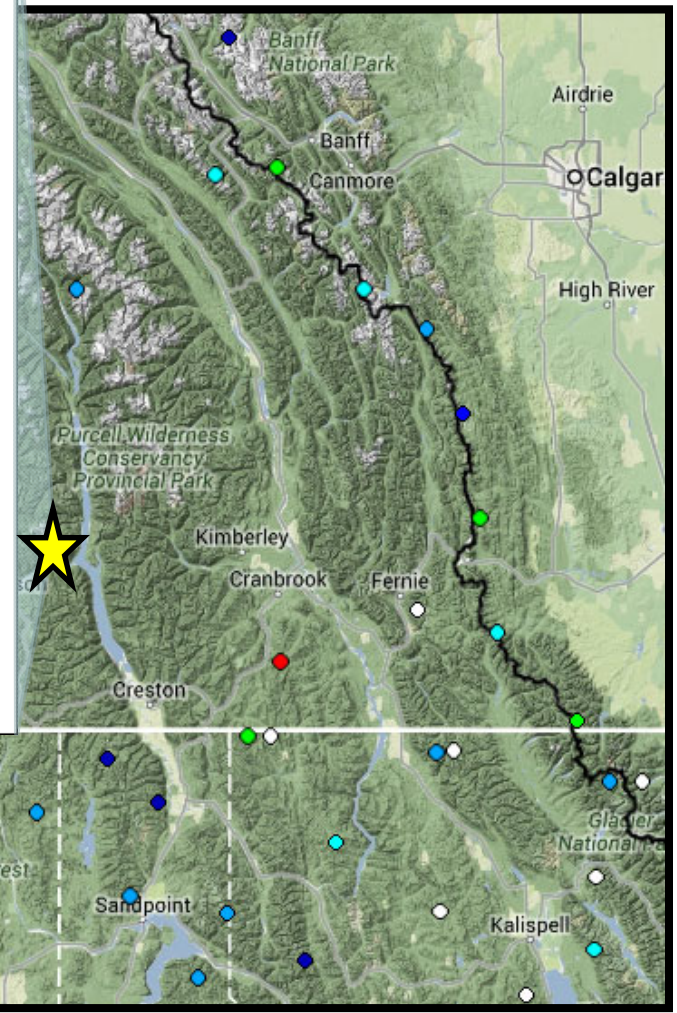
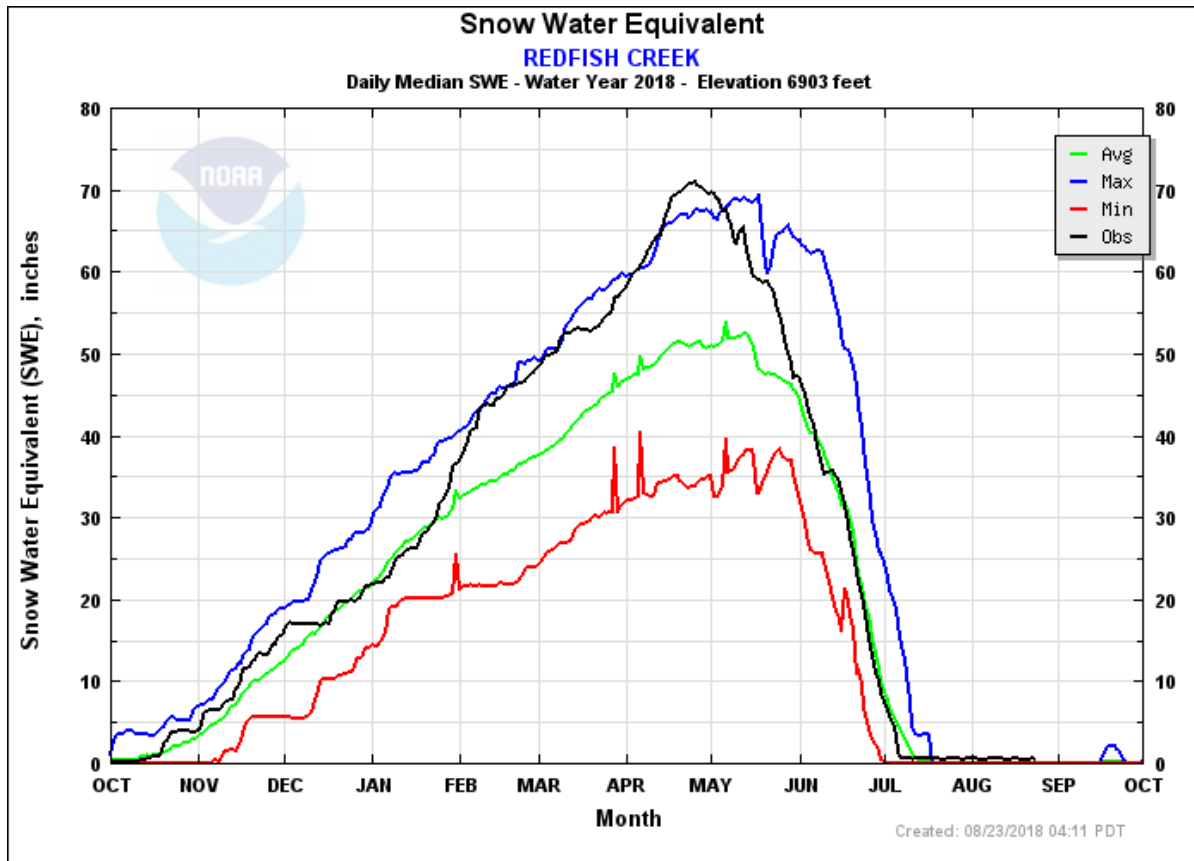
- Precipitation
- Wet April
 - Dry May



2018 Snowmelt Runoff

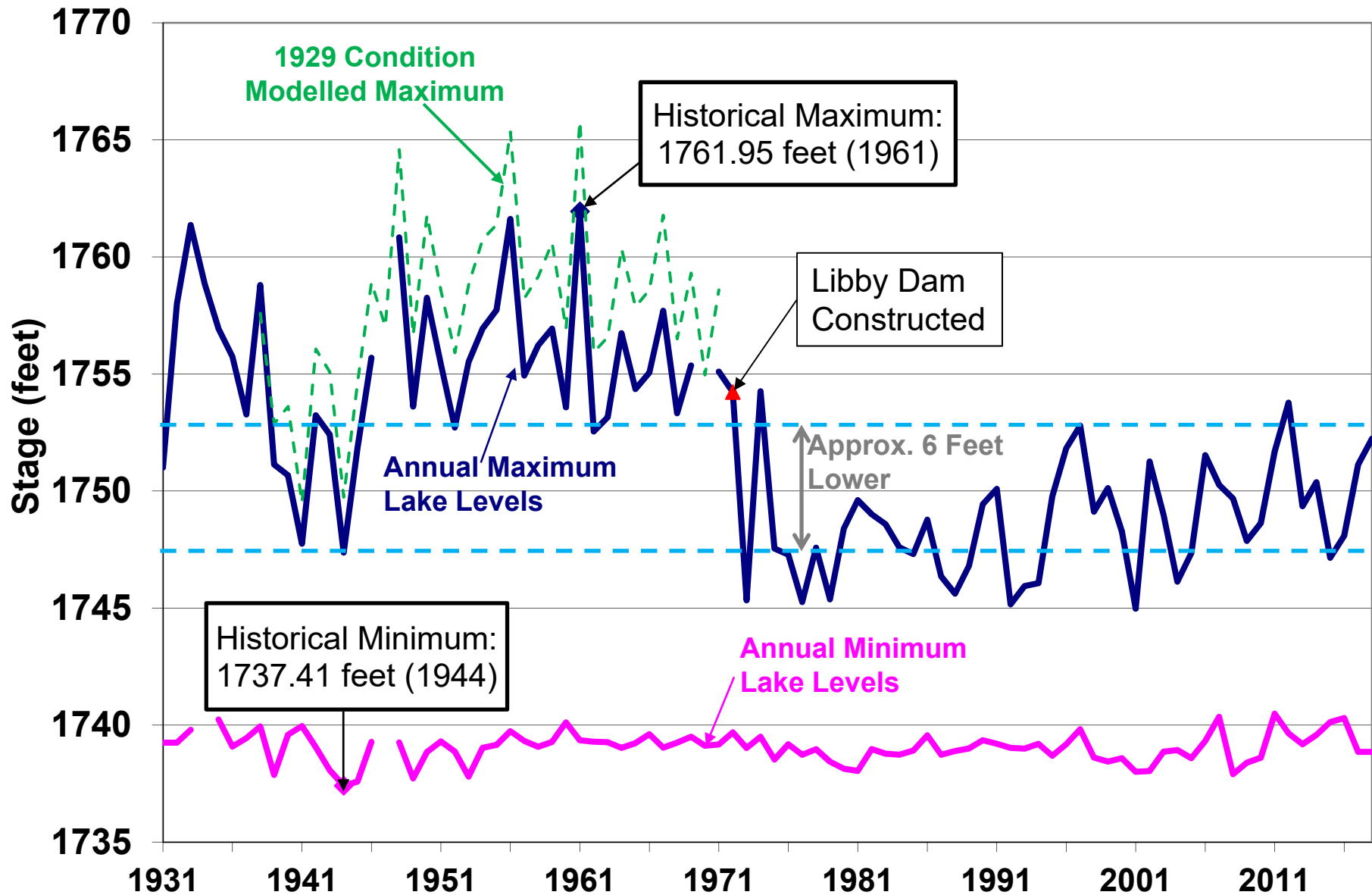


2018 Snowmelt Runoff

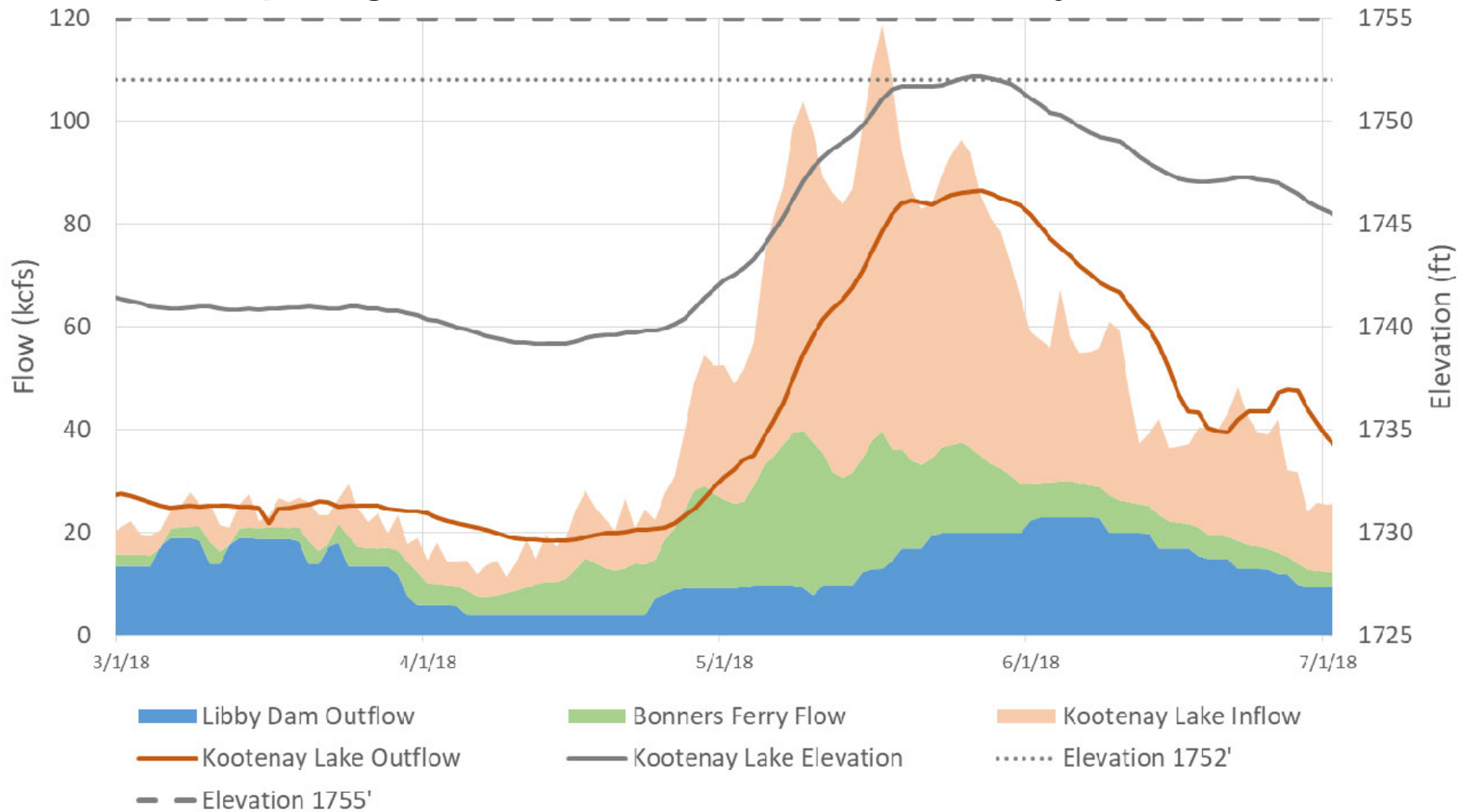


Historical Water Level Extremes

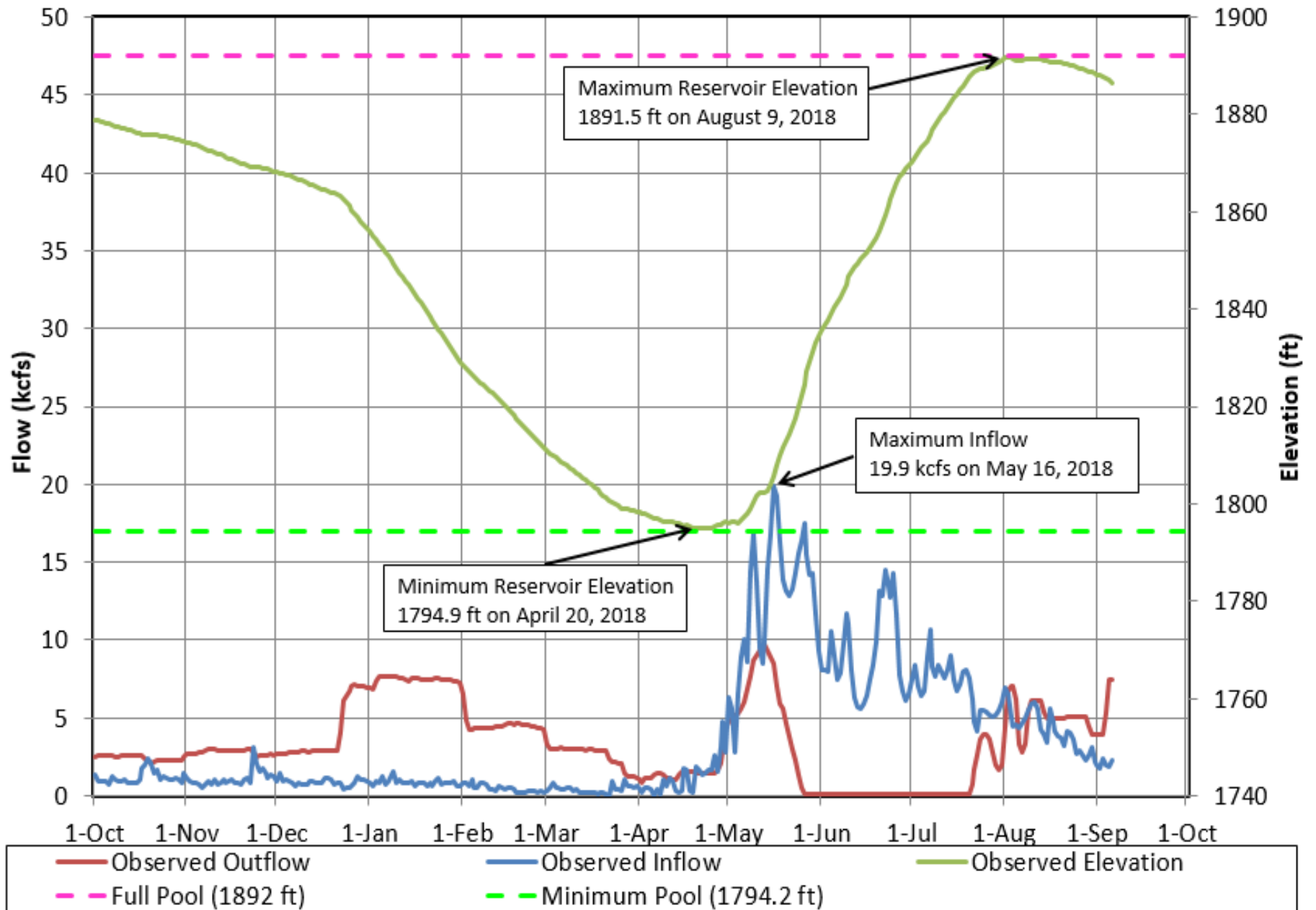
Kootenay Lake (Queen's Bay)



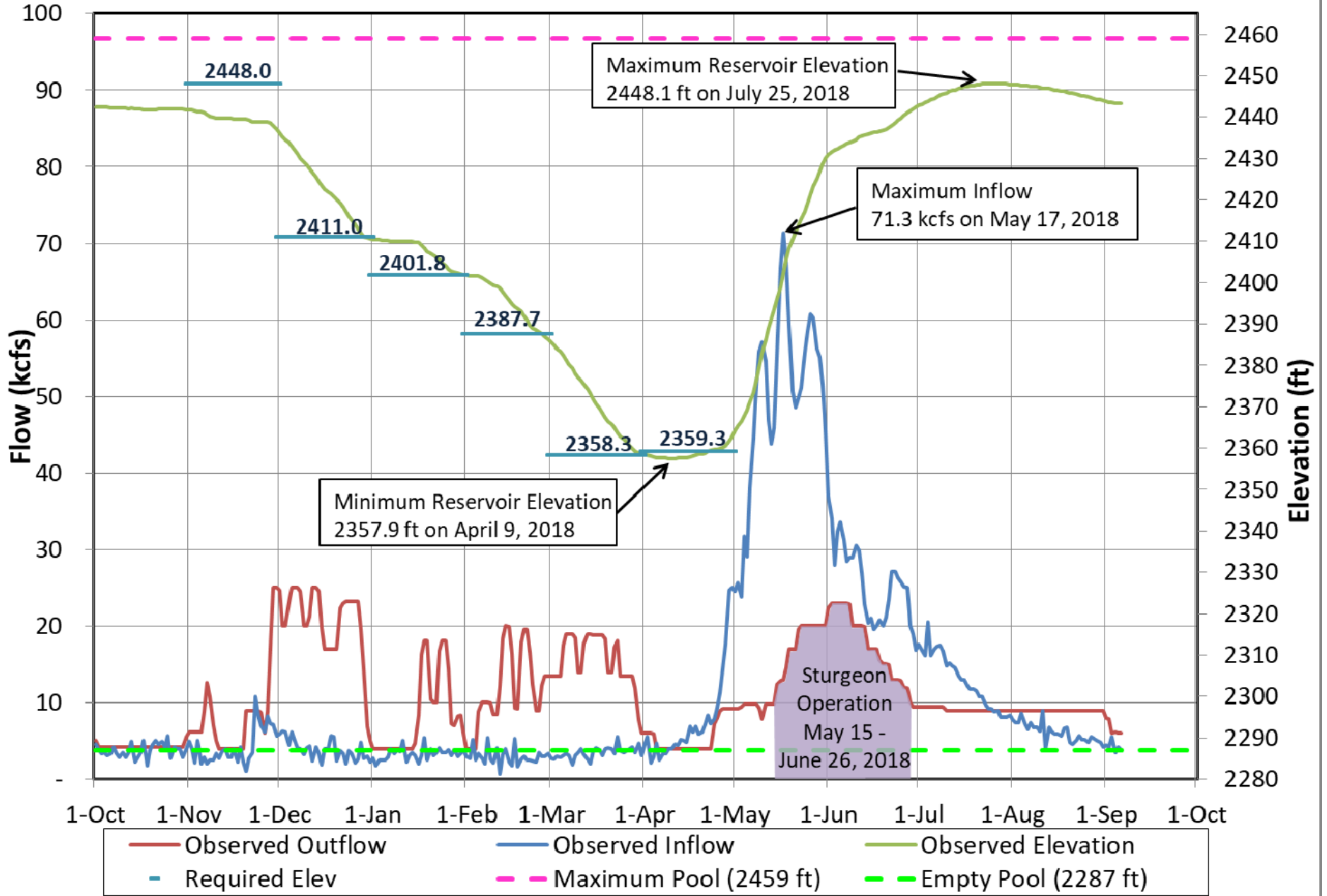
Spring 2018 - Inflow to Kootenay Lake



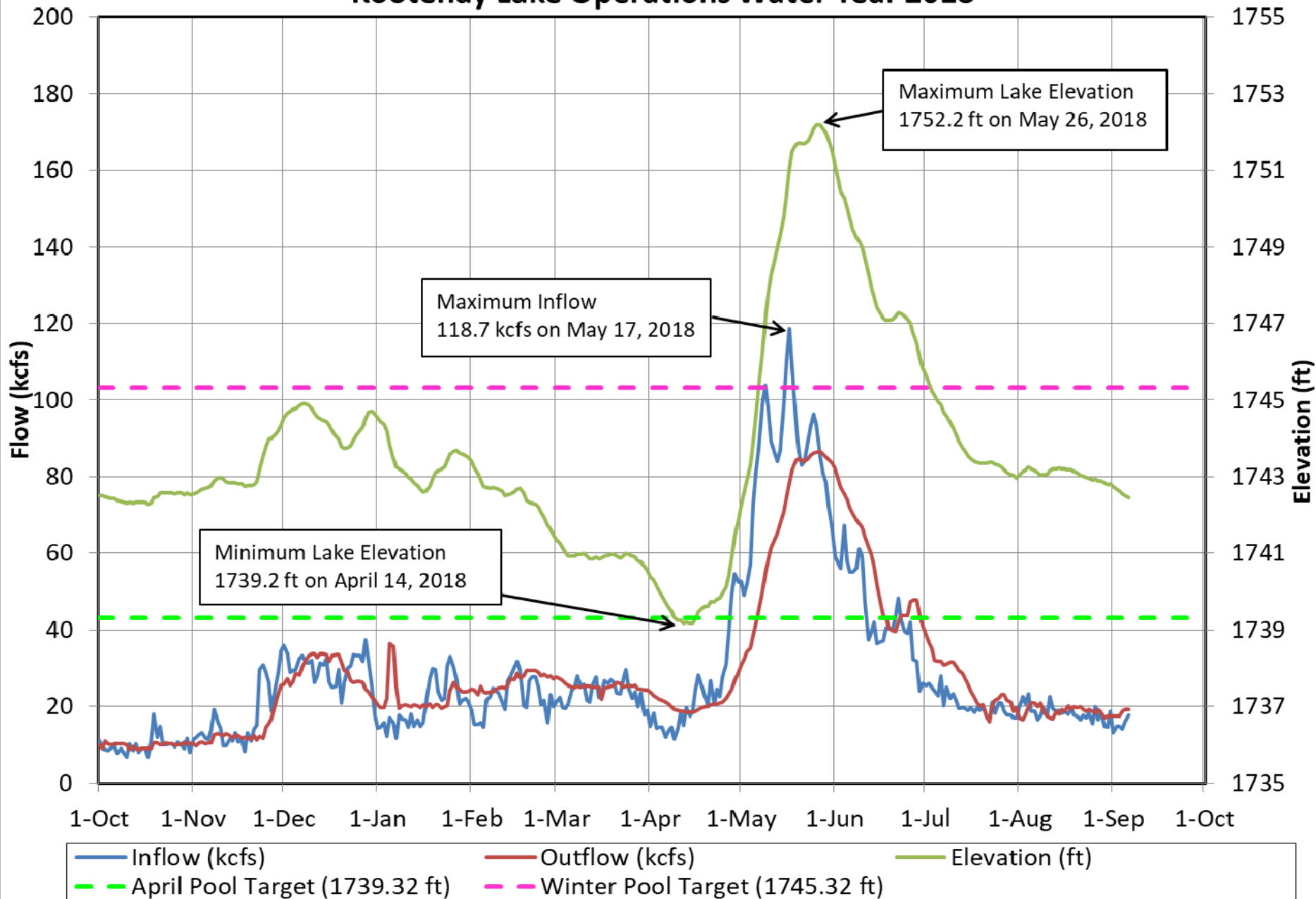
Duncan Reservoir Operations Water Year 2018



Koocanusa Reservoir Operations Water Year 2018



Kootenay Lake Operations Water Year 2018



Questions?

