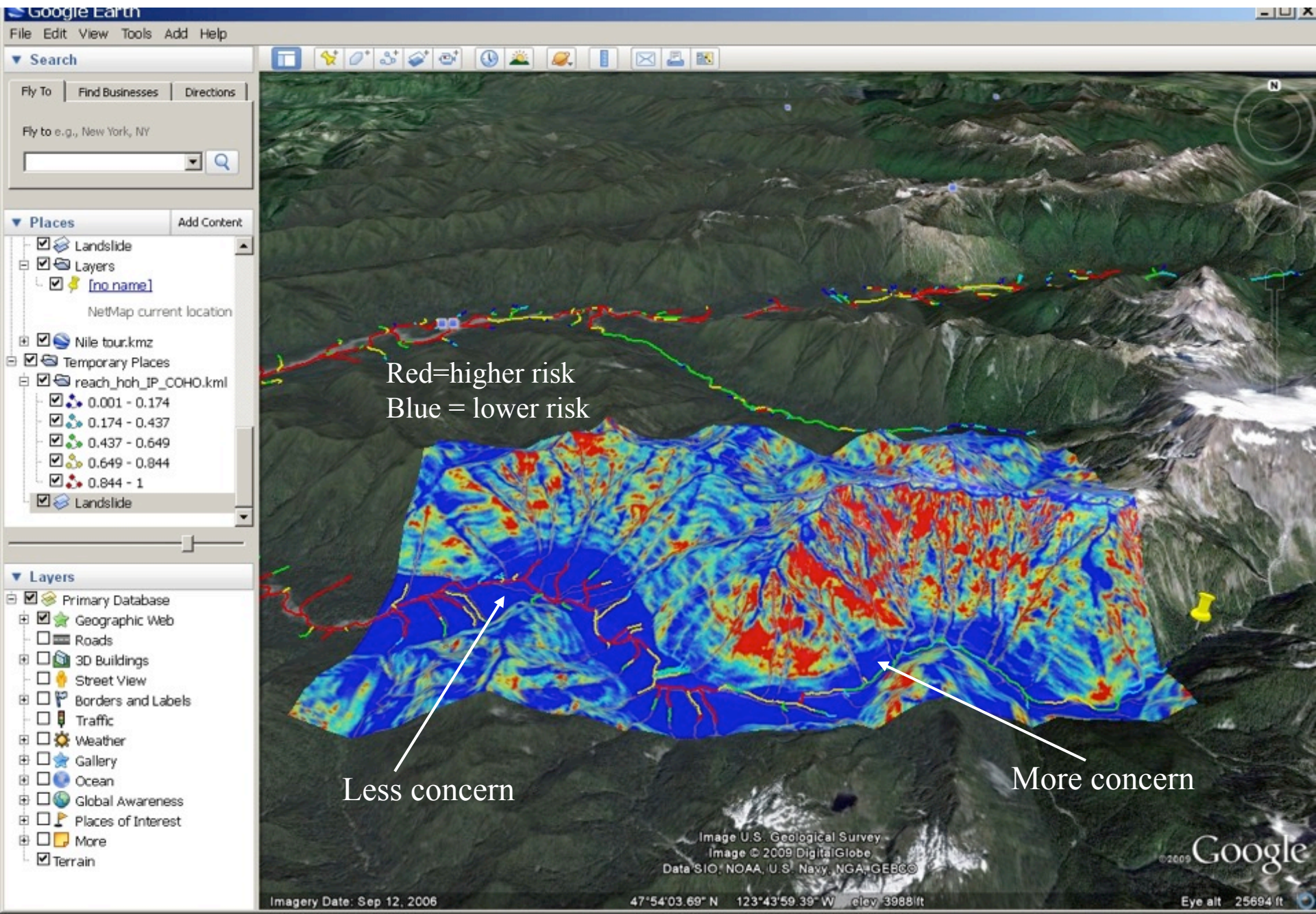
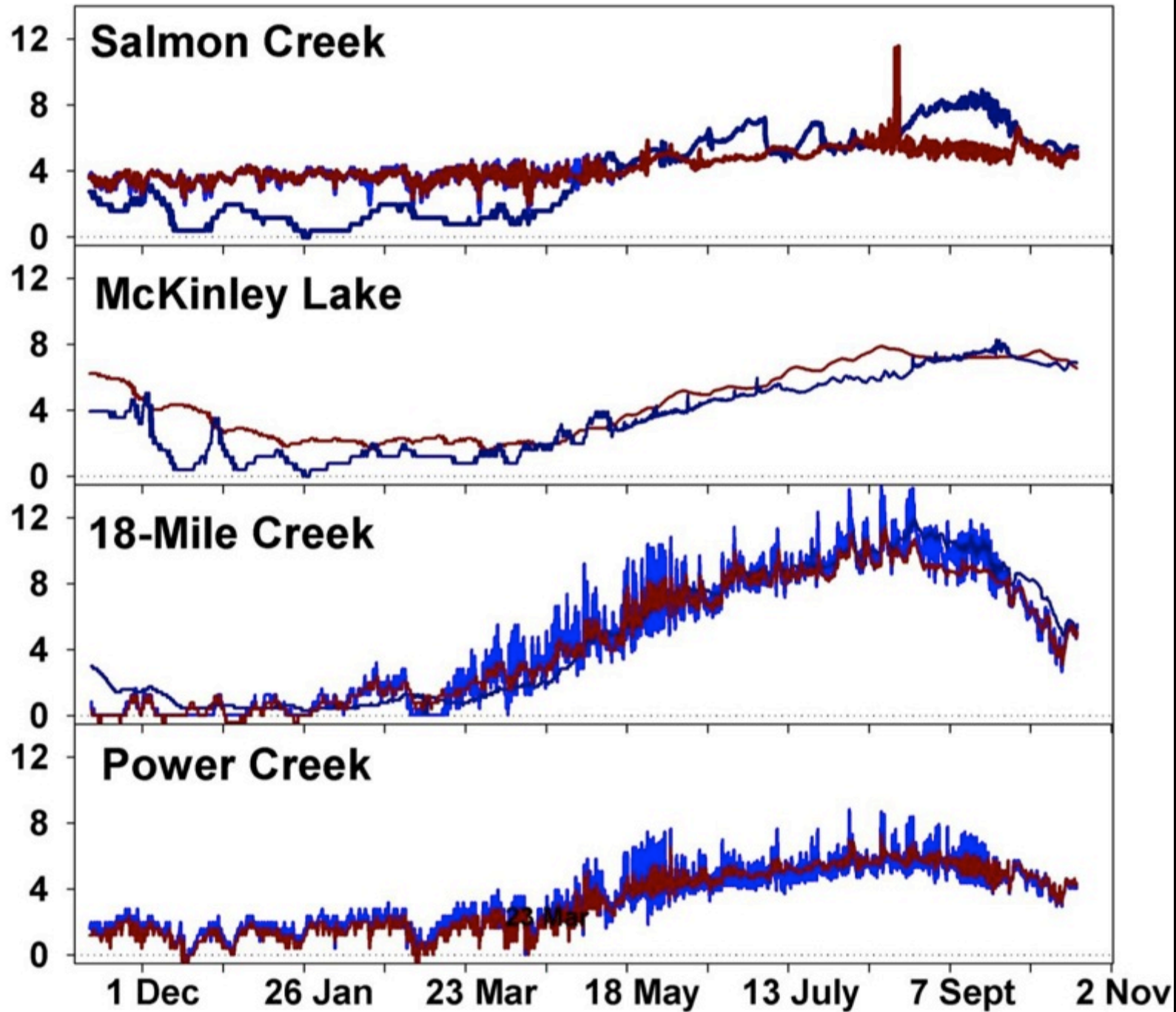
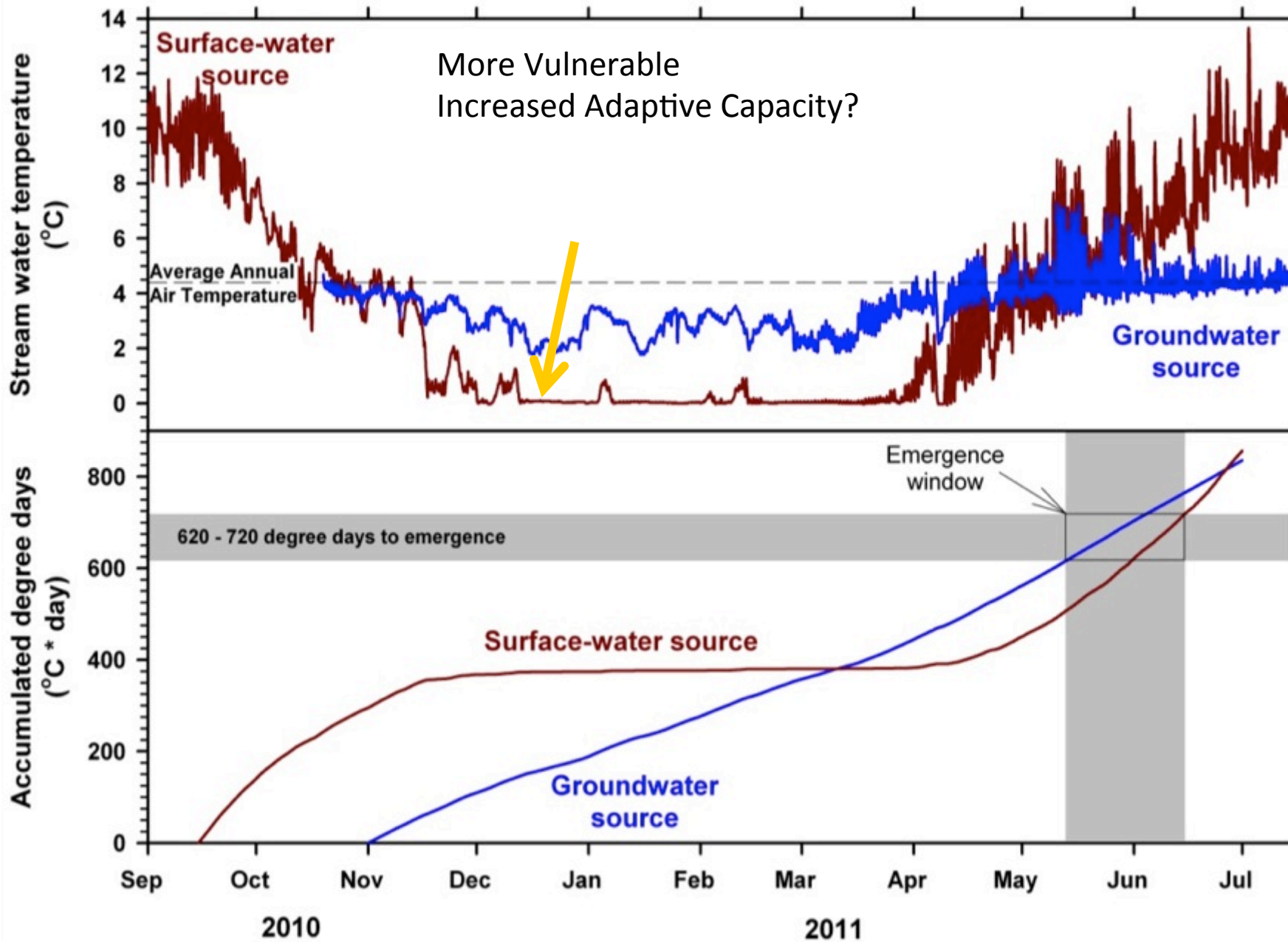


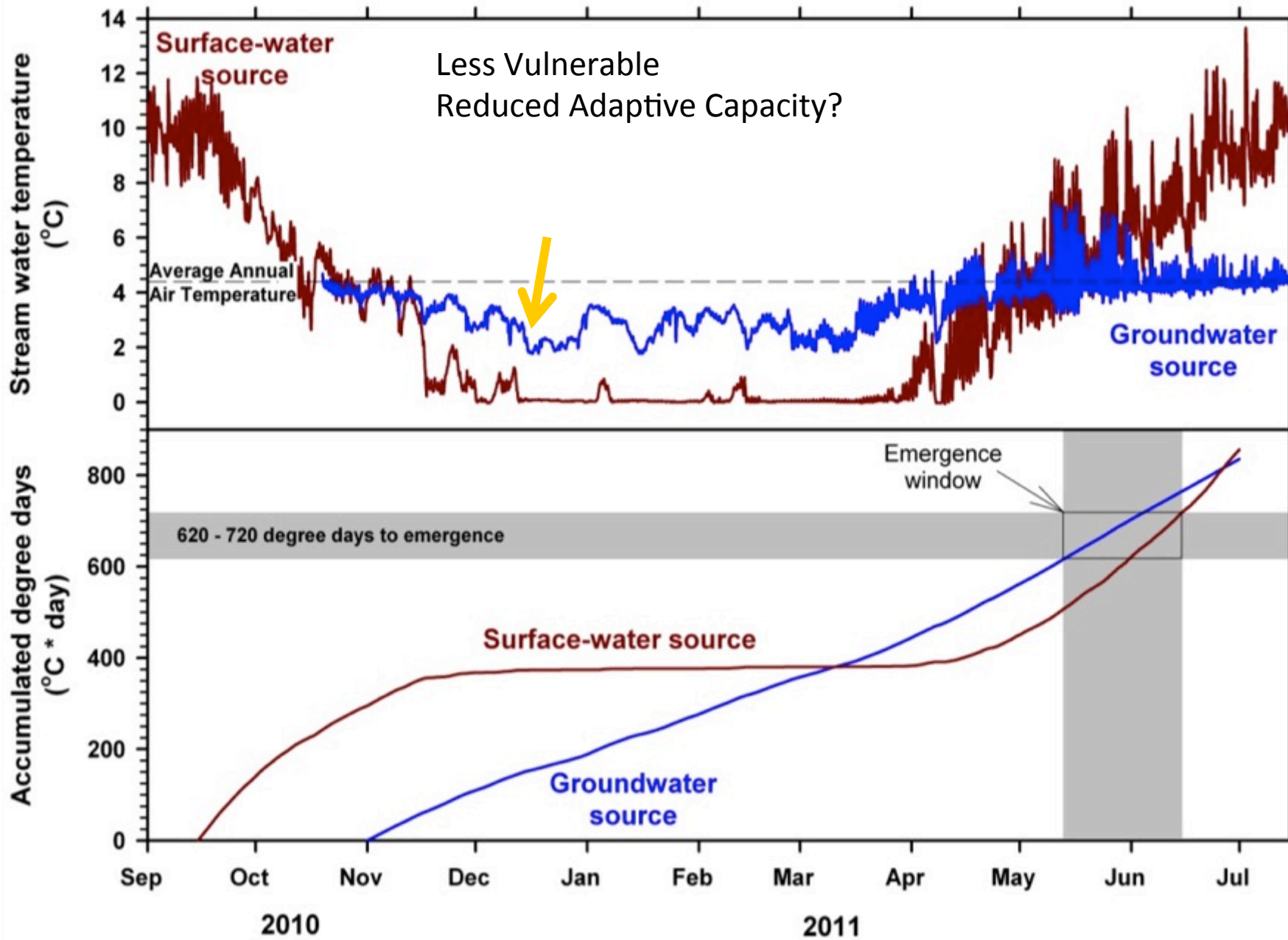
Predict shallow landslide potential, export to Google Earth, and identify overlaps w/habitats



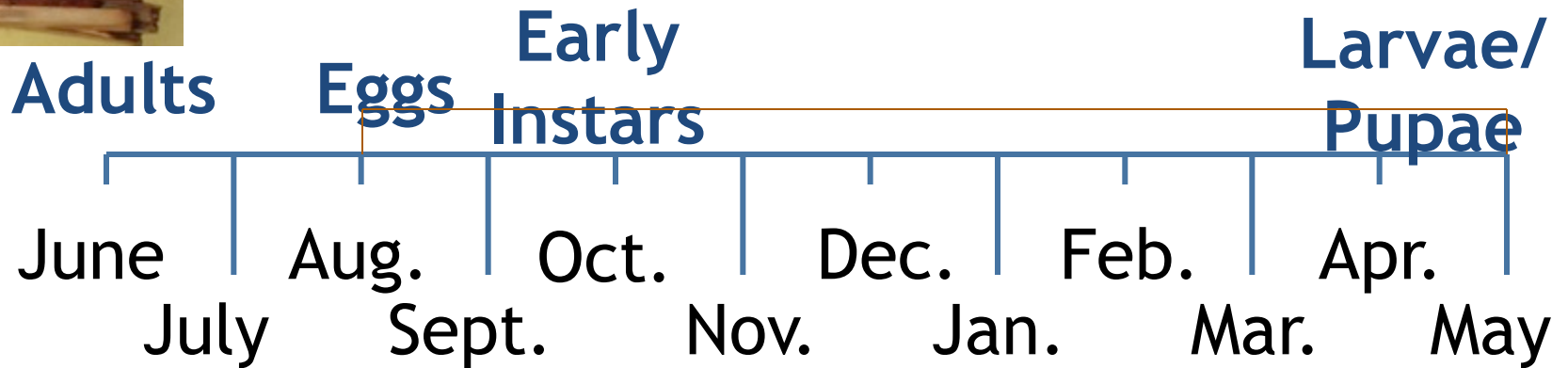
Water temperature (daily max / min in °C)







Life-history Cycle of a '1-year Aquatic Insect' on the Copper River Delta



*Birds:
Nesting/
fledging*

*Leaf
drop*



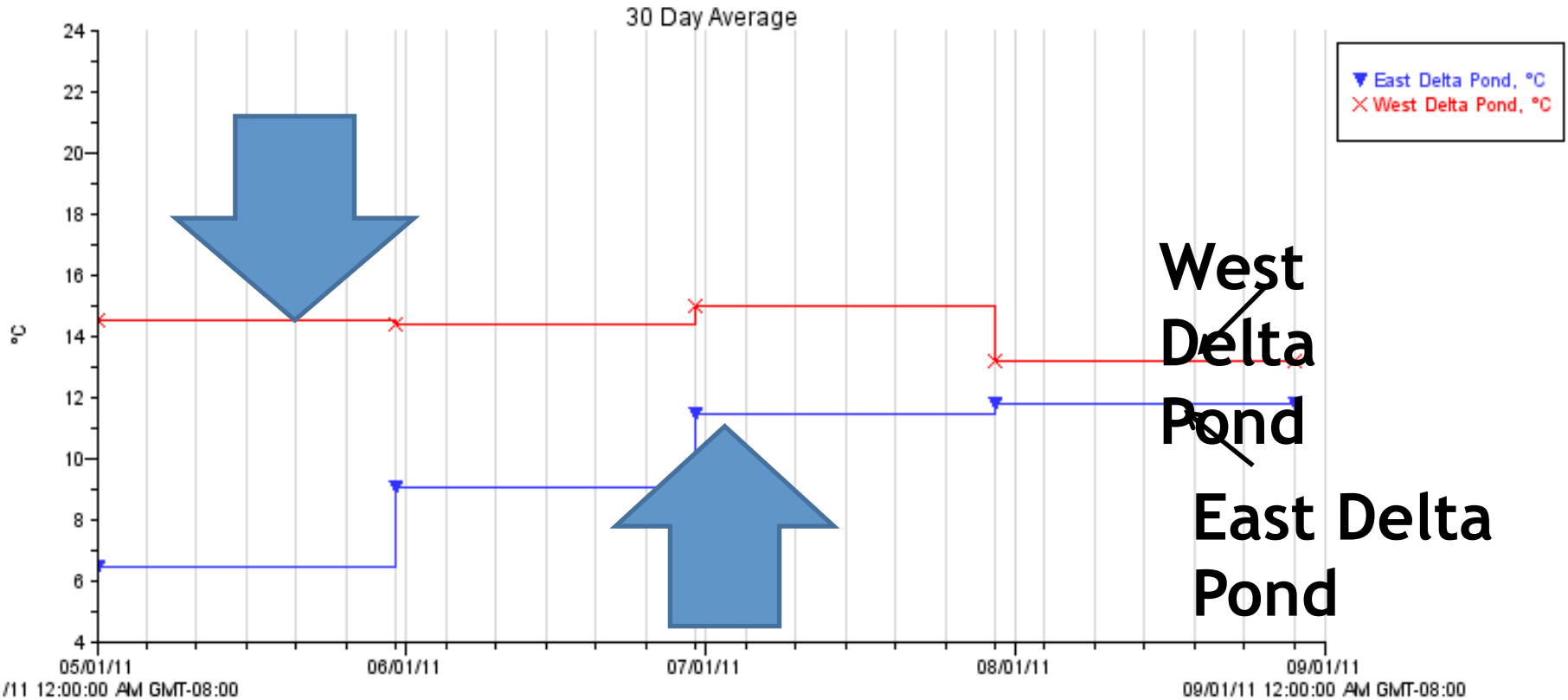
Life-history Cycle of a '1-year Aquatic Insect' on the Copper River Delta



Insect, with 1°C change in water temp.

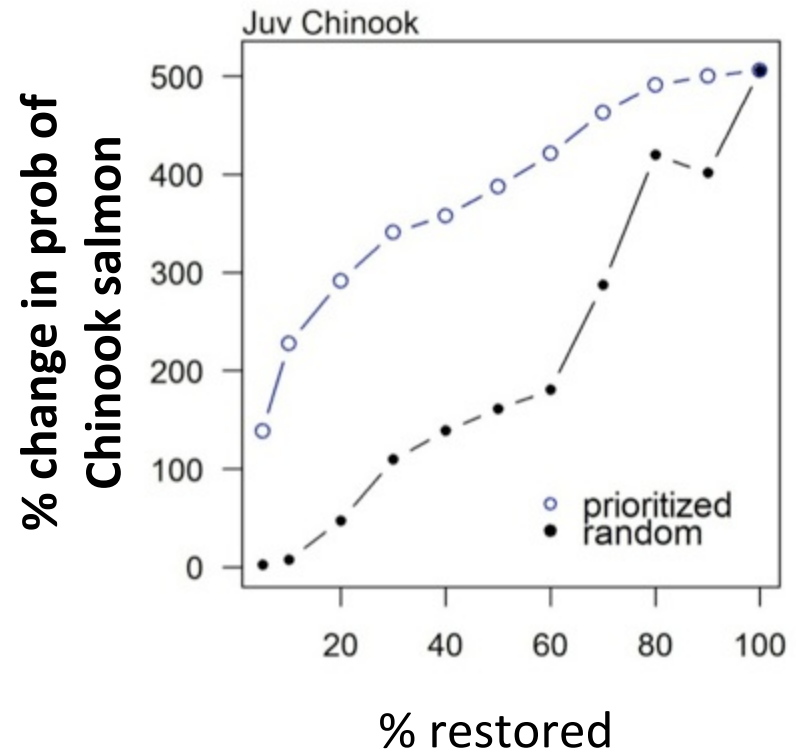
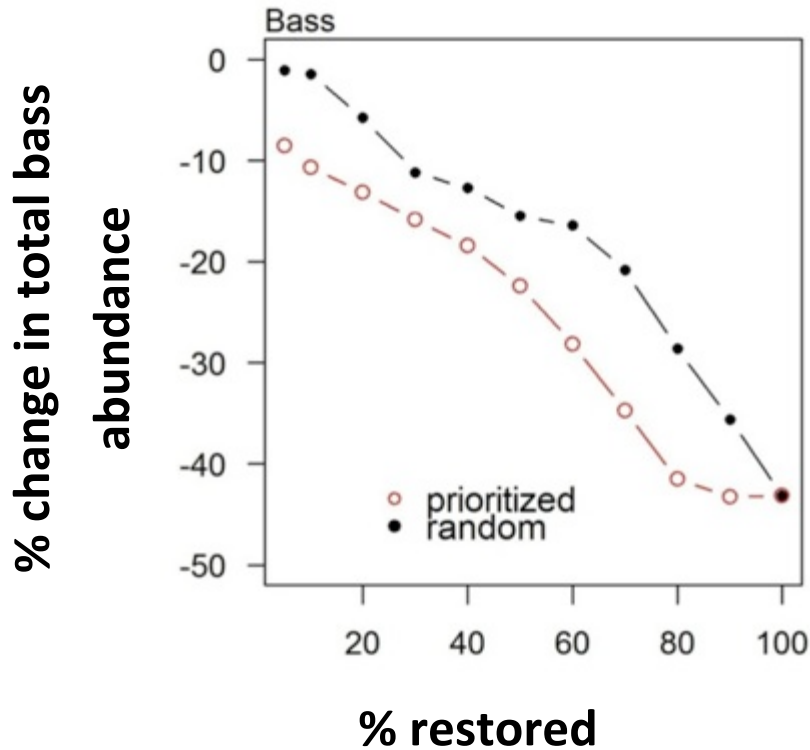


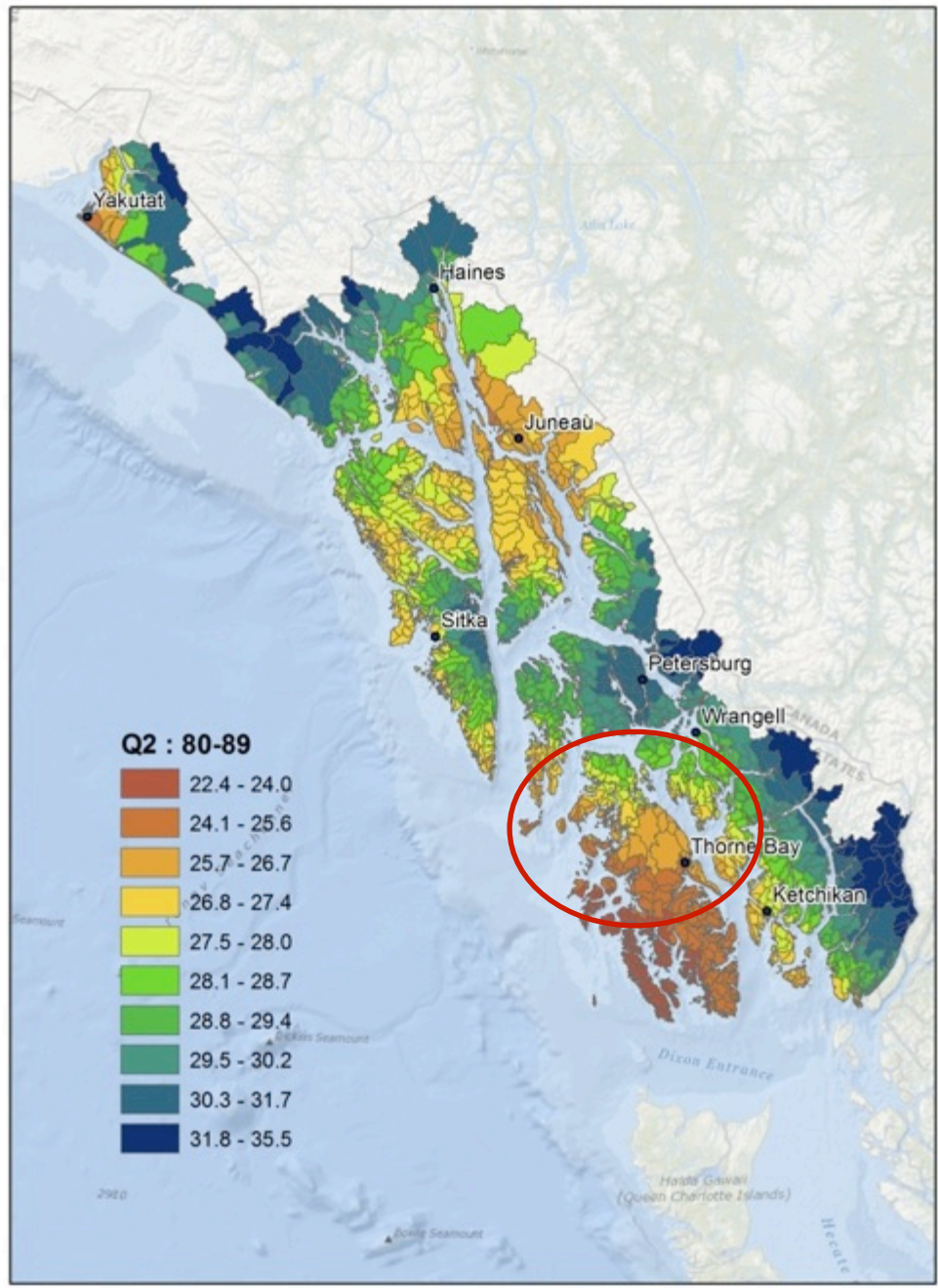
Thermograph

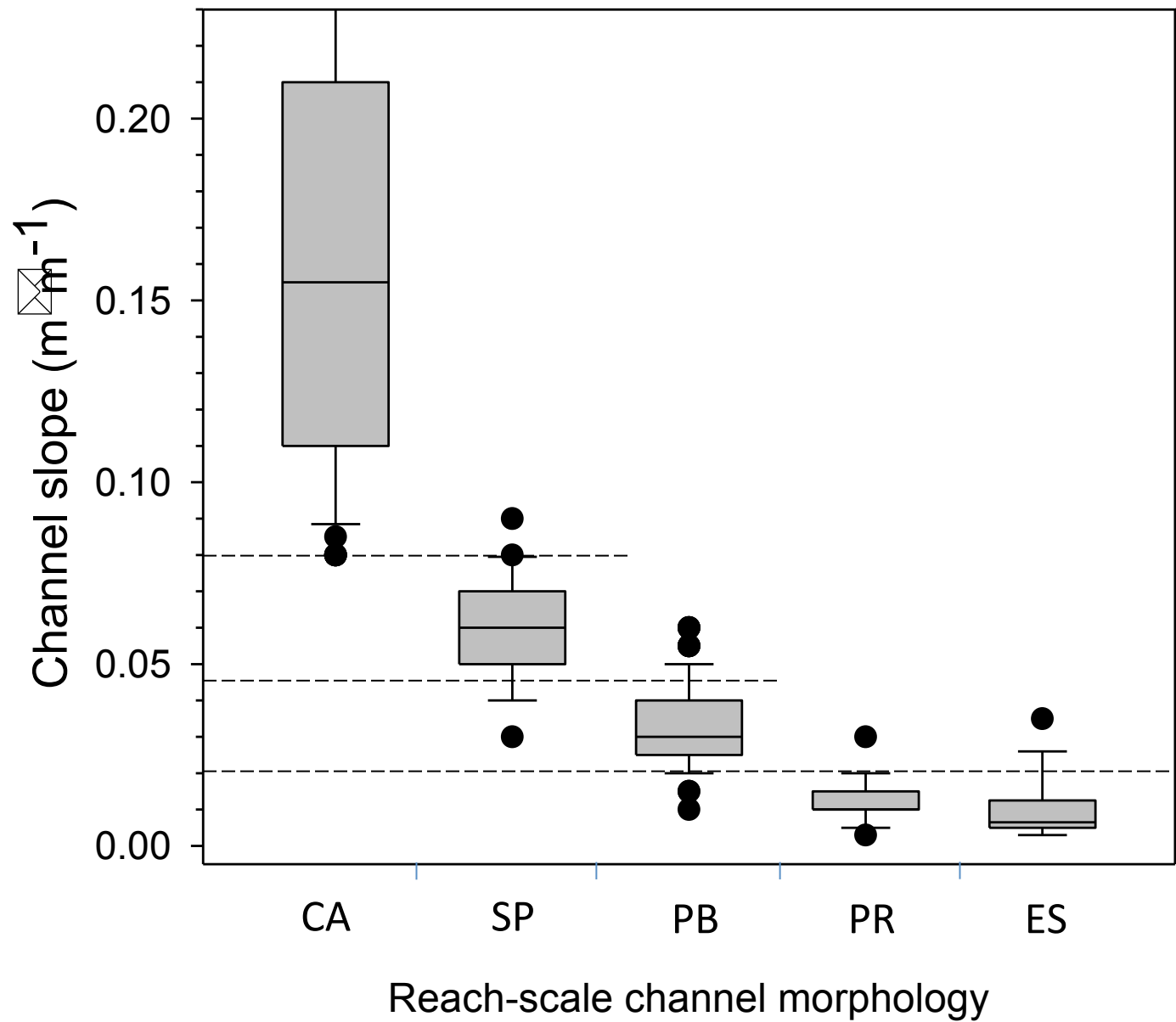


Benefit of riparian restoration: 2080

Middle Fork John Day River

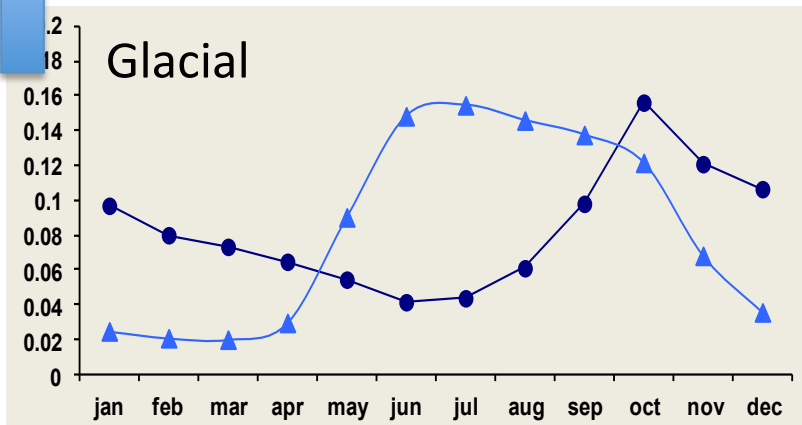
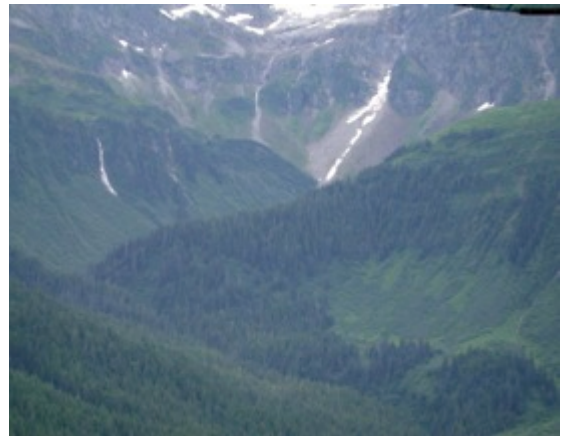
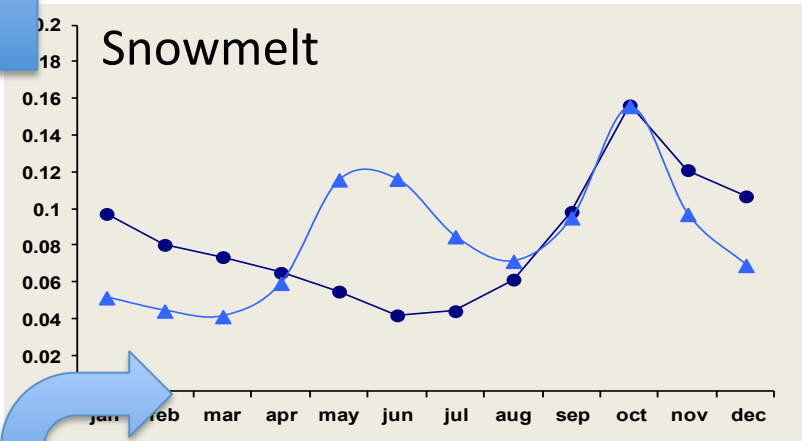
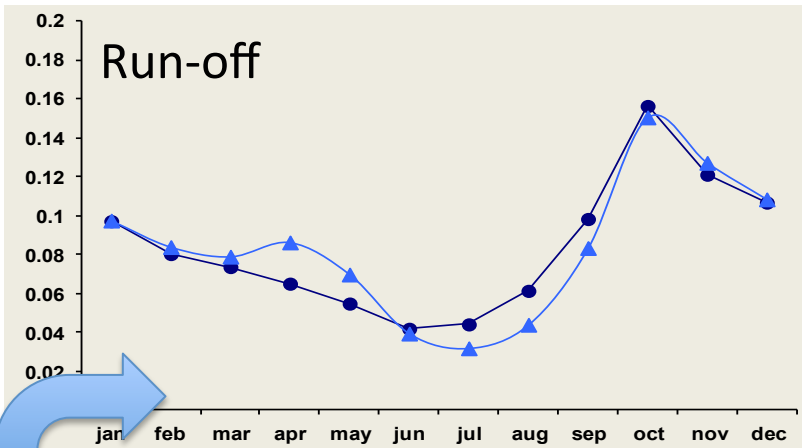






% of annual precipitation

% of annual hydrograph



The Oregonian

AM
SEVEN
CENTS
FEB. 10,
1996
PORTLAND,
OREGON
35 CENTS

WEATHER
Foggy early
Big rain
Monday morning
Saturday
High 34,
low 30.
BACK
BY SPOTS



— COMPLETE REPORT —
Main news section including regional overview, pages A2, A5 through A12; Metro, pages B1, B2; Business impact, E1



— HOW TO COPE — When the flood tide turns, it's time to dig in, scrub up and start to return to a normal life at home — with this complete guide / LIVING, D1

THE FLOOD OF '96

WRATH AND AFTERMATH

PORTLAND

■ The Willamette River crests, and OMSI and the harbor wall escape the worst

THE SUBURBS

■ Clackamas and Washington counties see major trouble along the Tualatin River

THE REGION

■ Some Oregon evacuees return, but problems plague Southwest Washington

TODAY'S DEVELOPMENTS

■ SUBURBS UNDER WATER: Waters from the Tualatin and Willamette rivers flood dozens of miles of Gladstone, Oregon City, Lake Oswego and Tualatin on Friday. Many businesses were damaged or closed, and homes were swamped with water.

■ TAKING A TOLL: A flood forced the evacuation of 22,000 people in Oregon and 7,000 in Washington. Three people died and two are missing in Oregon, and one man died in Washington.

■ INDIAN WARRIOR: The Columbia River continued to rise, flooding Clatskanie on the Oregon side and Woodland and Vancouver in Washington. In Clatskanie, this week has been a series of disasters that have touched just about all of the 1,500 residents.

■ FEDERAL AID: President Clinton on Friday declared 17 Oregon counties and the Warm Springs Reservation, as well as 13 Washington counties, eligible for federal disaster aid.

■ TRAFFIC JAM: With floods and mudslides, getting almost anywhere is a challenge. In Portland alone, 113 lanes affected by traffic jams will see the difficulties well as they continue into next week.

■ SOME HAVE TOO MUCH WATER: Thousands headed to downtown Portland on Friday to gawk at the Willamette River as it neared historic levels, just inches shy of the harbor wall that has been extended with plywood and sandbags.

■ SOME DON'T HAVE ROOMS: There's plenty of floodwater around, but not enough for drinking. The city of Portland has asked residents to



Above: John Chambers escapes from his kitchen window at high water along Upper Boones Ferry Road in Tualatin Friday. His wife and children had moved to higher ground while he took belongings to the attic.

Right: Lola Palomaki finds a Bible in her mother-in-law's bedroom Friday in Clatskanie as her father-in-law (pointing) helps find other family possessions. The room was hip-deep in mud and slash timber.



Sometimes High Intensity Trauma Happens

L.M. Reid

Floodwaters may stage slow retreat

The Tualatin River basin becomes a major concern

By STEVE MAYER and ERIN HOOVER of The Oregonian staff

Oregon's remaining rivers unleashed their final fury Friday before beginning their slow retreat. Oregonians are still recovering from the damage done by the floodwaters that peaked last week. The Tualatin River basin, which includes parts of Washington, Woodland and Vancouver Wash., remained locked in a battle against high water.

Perhaps the largest source of crisis, however, loomed in the Portland suburbs in the Tualatin River basin, where rising water submerged basements and homes. By Saturday afternoon, almost all river levels in Western Oregon will have dropped. And dry, mild weather is forecast for well into next week, according to the National Weather Service.

"But it's going to be a very slow drop," river forecaster Irv Kesteven said. Late Friday night, a car drove into a swollen Dairy Creek, about two miles north of Corvallis in Washington County. Corvallis Fire Department rescue team members plucked two victims from the water by boat, but another person was thought to be missing.

The two rescued were hospitalized. One was in serious condition. Their conditions were not available.

While the sky dried-out, catastrophic fire season, it became a critical for others.

Please turn to FLOOD, Page A12

Raging rivers play havoc with water systems

Cities ask residents to cut use and warn of contamination

By STEVEN CARTER of The Oregonian staff

Four days of pouring rain and flood surges left thousands of Oregon residents without drinking water. The floods also pushed Portland off