

Columbia River Basin Flyover Backgrounder

The **Columbia River Basin Flyover** is designed to give students a way to glimpse the river as a whole; its geography, infrastructure, topography, and more, without having to travel. This “hang glider view” of the Basin helps students to understand how the land and water change from source to sea, and points out a few of the important landmarks along the way.

1. **0:00 — Overview of the Basin:** A broad view of the upper Columbia River Basin in Canada and the Pacific northwest in the US.
2. **0:14 — Headwaters of the Columbia:** Columbia Lake is located by Canal Flats, BC. The source of the Columbia River is actually a small spring that bubbles from the ground and flows into Columbia Lake.
3. **0:35 — Lake Windermere:** Lake Windermere is located by Invermere BC. This is the second lake that the Columbia River flows through.
4. **0:47 — Columbia Wetlands:** The Columbia Wetlands mark a change in environment, going from lake to wetland. This wetland is one of the most important ecosystems in BC, and is a necessity for migratory birds. This area is one of the only free-flowing (undammed) sections left on the Columbia River.
5. **0:57 — Kinbasket Reservoir:** Kinbasket Reservoir is one of the largest reservoirs on the Columbia River system. It was created by Mica Dam.
6. **1:06 — Big Bend:** At this section, the Columbia River makes a hairpin turn, changing its overall direction of flow from North to South.
7. **1:15 — Mica Dam:** Mica Dam is one of the four Columbia River Treaty dams, three of which are in Canada. This dam was built to store water and create hydroelectric energy.
8. **1:26 — Revelstoke Dam:** Revelstoke Dam is located on the Columbia River, but is not one of the Columbia River Treaty hydro-generating dams.
9. **1:35 — Revelstoke:** The City of Revelstoke is located downstream of Revelstoke Dam.
10. **1:46 — Upper Arrow Lakes Reservoir:** This is the northern end of the Arrow Lakes Reservoir, which is behind the Hugh Keenleyside Dam. Before the dam, this valley contained many communities. Numerous farms, orchards, houses, and natural ecosystems were destroyed when the reservoir was created.
11. **1:57 — Nakusp:** One of the communities located along the Arrow Lakes Reservoir. This town in particular lost thousands of acres of land due to flooding for the reservoir.

12. 2:08 — **Burton:** The site of a town flooded by the reservoir, which is still home to a small community.
13. 2:18 — **Renata:** Renata is the site of another former community flooded by the reservoir, just upstream of Hugh Keenleyside Dam.
14. 2:28 — **Hugh Keenleyside Dam:** One of the three Columbia River Treaty dams located in Canada.
15. 2:37 — **Columbia-Kootenay Confluence:** The Kootenay River and the Columbia River join together in Castlegar, BC before flowing south into the USA.
16. 2:48 — **Columbia River goes into the USA:** The Columbia River now crosses the international border and continues to flow towards the ocean.
17. 3:00 — **Kettle Falls:** Kettle Falls was once a significant trading and fishing location for many Indigenous peoples. The falls were flooded when the Grand Coulee Dam was built.
18. 3:12 — **Grand Coulee Dam:** The Grand Coulee Dam is not one of the Columbia River Treaty dams, but has significantly impacted the Columbia River, as it was the first dam to block salmon from returning to the Upper Columbia. Notice how the environment has changed from green, mountainous terrain to dry, flat desert.
19. 3:22 — **Hanford Reach:** The Hanford Reach is another one of the only free-flowing sections left on the Columbia River. This stretch flows through the Hanford Site, which is a decommissioned nuclear area.
20. 3:32 — **Columbia-Snake Confluence:** At this location, the Snake River joins with the Columbia River. The Snake River is the Columbia's largest tributary.
21. 3:45 — **The Dalles:** In this area, the climate shifts from a dry climate accompanied by flat terrain, to a coastal mountain region with a wet climate as the Columbia gets closer to the ocean.
22. 3:57 — **Columbia Gorge:** Close to the Bonneville Dam and the community of Cascade Locks, the Columbia Gorge is most well known for its unique scenery and beautiful waterfalls.
23. 4:10 — **Portland (Willamette River):** Almost done! Portland is the largest city along the Columbia River. It also is where the Willamette River joins the Columbia River.
24. 4:23 — **Astoria:** Finally! Astoria, OR is where the Columbia River meets the ocean after 2,000 km of river, starting from the small, bubbling spring in Canal Flats, BC, Canada.