**LAKE GRANBY**
Located on the Colorado River, Lake Granby is the largest reservoir in the Colorado-Big Thompson system. Constructed during the 1940s, Lake Granby began storing water in the fall of 1949. From Lake Granby water is pumped via the Farr Pumping Plant to the Granby Pump Canal, where it flows into Shadow Mountain Reservoir and through a connecting channel to Grand Lake.

**WILLOW CREEK RESERVOIR**
Willow Creek Reservoir, located two miles west of Lake Granby, captures snowmelt runoff within the Willow Creek basin. The Willow Creek Pumping Plant lifts water 175 feet to the Willow Creek Supply Canal, where it flows 1/4 mile into Lake Granby. The reservoir, dam, pumping plant and supply canal were all built between 1951 and 1953.

**SHADOW MOUNTAIN RESERVOIR**
Located strategically between Lake Granby and Grand Lake, Shadow Mountain Reservoir receives water from the North Fork of the Colorado River and water pumped from Lake Granby, Built between 1944 and 1946, Shadow Mountain acts as a regulating reservoir to help maintain a constant surface elevation in Grand Lake, and as a conduit between Lake Granby and Grand Lake.

**GRAND LAKE**
Grand Lake is the largest natural water body in Colorado. Due to the lake’s scenic beauty and proximity to Rocky Mountain National Park, C-BT Project operations minimize fluctuations in Grand Lake’s level to one vertical foot. At Grand Lake’s southeast shore water enters the West Portal of the Alva B. Adams Tunnel on its way to the East Slope.

**ALVA B. ADAMS TUNNEL**
The Adams Tunnel is considered the lynchpin of the C-BT. Constructed between 1940 and 1947, the tunnel carries water by gravity beneath the Continental Divide to the East Slope in less than three hours. The tunnel can deliver approximately 1,100 acre feet of water in a 24-hour period at maximum capacity.

**LAKE ESTES**
Lake Estes, formed by Olympus Dam on the Big Thompson River, re-regulates flows to and from the Estes Power Plant. Prospect Mountain Conduit and Tunnel carries water from Mary’s Lake to the Estes Power Plant penstock.

**PINEWOOD RESERVOIR**
Pinewood Reservoir, formed by Rattlesnake Dam, was completed in 1952. Originally known as Rattlesnake Reservoir, the name was officially changed in 1966. Pinewood serves as an afterbay to Pole Hill Power Plant and the forebay to Flatiron Power Plant, regulating flows and managing peak power demands.

**FLATIRON RESERVOIR**
Completed in 1953, Flatiron Reservoir can distribute C-BT water north and south and serves as an afterbay for the Flatiron Power Plant. From Flatiron C-BT water flows north to the Big Thompson River, Horsetooth Reservoir and the Poudre River. Or, water can be pumped south to Carter Lake and then delivered to the Little Thompson River, Saint Vrain Creek, Boulder Creek, the South Platte River and the Southern Water Supply Project pipeline.

**HORSETOOTH RESERVOIR**
Horsetooth Reservoir is the C-BT’s largest East Slope storage facility. Located west of Fort Collins, it supplies water to municipal, domestic, industrial and agricultural water users throughout the Poudre River basin. The reservoir was constructed between 1946 and 1949. Water is delivered to Horsetooth through the 13-mile Hansen Feeder Canal.

**CARTER LAKE**
Carter Lake, the second largest reservoir in northeastern Colorado, supplies C-BT water to cities, towns, water districts, industries and irrigated crop land in the South Platte River basin. Construction began in 1950 and was completed two years later. Water is pumped to Carter Lake from Flatiron Reservoir through the 300 foot Carter Lake Pressure Tunnel.

**BOULDER RESERVOIR**
The decision to build Boulder Reservoir was made 16 years after the NCWCD formed in 1937. Post-World War II growth and a drought in the late 1940s convinced Boulder officials the city needed additional water. Boulder joined the District in January 1953, and Boulder Reservoir was completed in 1955.
COLORADO-BIG THOMPSON PROJECT
In 1938 the Northern Colorado Water Conservancy District contracted with the U.S. Bureau of Reclamation to construct the Colorado-Big Thompson Project. The federally owned project is jointly operated by the District and Reclamation. The C-BT Project provides supplemental water for agricultural, municipal, domestic, industrial and recreational uses in northeastern Colorado.

The C-BT is Colorado’s largest transmountain diversion project. Built between 1938 and 1957, the C-BT system consists of six hydropower plants, three pumping plants, 12 reservoirs, 35 miles of tunnels, 95 miles of canals and 700 miles of transmission lines. It spans 150 miles east to west and 65 miles from north to south.

WEST SLOPE COLLECTION SYSTEM
The C-BT Project’s West Slope facilities consist of four reservoirs or lakes and two pumping plants. The C-BT system collects high mountain runoff for diversion to the East Slope. Most of this water is stored in Lake Granby, accumulating mainly during spring snowmelt.

EAST SLOPE DISTRIBUTION SYSTEM
The C-BT Project’s East Slope Distribution System facilitates water storage and delivery throughout the District. After water exits the Adams Tunnel’s East Portal it is used to generate electricity, dropping vertically a half mile through five power plants to the Front Range. Electricity sales help pay a considerable portion of C-BT costs.

WINDY GAP PROJECT
Located just west of the town of Granby, the Windy Gap Project consists of a diversion dam on the Colorado River, a 445-acre-foot reservoir, a pumping plant, and a six-mile pipeline to Lake Granby. Windy Gap is operated by the Municipal Subdistrict of the NCWCD. During spring runoff Fraser River water is pumped from Windy Gap Reservoir to Lake Granby, where it is stored for delivery through the C-BT system to Front Range water users. Windy Gap was completed and began operating in 1985 to supply additional municipal and industrial water needs.

Reservoir Statistics

<table>
<thead>
<tr>
<th>Reservoir Name</th>
<th>Capacity</th>
<th>Shoreline</th>
<th>Maximum depth</th>
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<tbody>
<tr>
<td>LAKE GRANBY</td>
<td>539,758 acre ft</td>
<td>40 miles</td>
<td>221 ft</td>
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<td>WILLOW CREEK RESERVOIR</td>
<td>10,553 acre ft</td>
<td>7 miles</td>
<td>124 ft</td>
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<td>SHADOW MOUNTAIN RESERVOIR</td>
<td>17,354 acre ft</td>
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<td>GRAND LAKE</td>
<td>68,600 acre ft</td>
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<td>ALVA B. ADAMS TUNNEL</td>
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<tr>
<td>SAVERING RESERVOIR</td>
<td>20 acre ft</td>
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<tr>
<td>MARY’S LAKE</td>
<td>927 acre ft</td>
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<td>LAKE ESTES</td>
<td>3,068 acre ft</td>
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<td>PINewood RESERVOIR</td>
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<td>FLATIRON RESERVOIR</td>
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<td>HorsTooth RESERVOIR</td>
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<td>BOULder RESERVOIR</td>
<td>13,270 acre ft</td>
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About Northern Water
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