

OPINION

The evolving value of Shasta Dam

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Shasta Dam is one of our country's great public works projects. Both the dam and the resulting Lake Shasta have cast an indelible imprint on Northern California for the past 75 years, where they stand as an important interface between the natural and human environment. The anniversary this week commemorating the 1938 groundbreaking provides a moment to reflect on Shasta Dam, the role that surface storage serves today in California, and how these facilities have shaped the landscape in Northern California.

California is a semi-arid state with 38 million people and both droughts and floods. The first part of 2013 was the driest on record and California benefitted from carry-over storage in reservoirs that are now being slowly depleted, as you can see when visiting Lake Shasta. Without access to this increment of surface storage, California would

already be suffering from water shortages.

The water supplies in Lake Shasta, as the keystone for the Central Valley Project, are managed for the benefit of the Sacramento Valley, which joins together a world-renowned mosaic of natural abundance: productive farmlands, wildlife refuges and managed wetlands, cities and rural communities, and meandering rivers that support and feed fisheries and natural habitats.

Water suppliers along the Sacramento River — including Redding, Sacramento, nearly a million acres of farms, and the National Wildlife Refuges — have priority for water. Additionally, areas in Shasta County and farms along the entire west side of the Sacramento Valley, from Corning to Dunnigan, receive water from Lake Shasta. Water supplies also benefit the San Francisco Bay Area and the San Joaquin Valley.

At the other extreme, during the wet spring two years ago Lake Shasta released water through its spillways to drop the lake level and provide flood control downstream. Lake Shasta is a critical part of the Central Valley Flood Protection Plan. By retaining flood flows on California's largest river with the largest reservoir, the project provides public safety and has reduced damage to property. Lake Shasta, in tandem with other reservoirs and an ingenious system of bypasses and levees, regulates ravaging flows and then releases water through the valley, avoiding impacts to rural and urban areas, including Sacramento, which simply would not exist today as we know it without Shasta Dam.

Nestled in between the fluctuating and sometimes conflicting management for floods and water supplies is the amazing recreational opportunities provided by Lake Shasta. Can

you imagine the Redding area without Lake Shasta or these nearby recreational opportunities?

To be sure, Shasta Dam impeded salmon runs to upper reaches of the system and it has affected natural wetlands and early communities in the Sacramento Valley. The public values in our water system have evolved from the Great Depression to now, and they continue to evolve.

Today, the leaders in the Sacramento Valley are on the leading edge of ecological and economic sustainability — they recognize and champion both migrating salmon and birds. Water from the Sacramento River has been one of the key elements in the surrogate wetlands (ricelands and refuges) that are supporting tremendous increases in bird numbers. For salmon, the major water diversions have screens or siphons that keep fish safe in the river and cold water

flows are timed to provide optimal habitat.

Yet the region continues to learn and improve. Water resources managers are continually exploring innovative new ways to optimize the Central Valley Project and Lake Shasta for all these beneficial purposes within the region. Nourishment and sustenance from the fields, habitats for fish and wildlife, recreation and a special quality of life — the Sacramento Valley is home to all of this, and more.

The challenge for this and future generations will be to improve the region's economic, environmental and social fabric within the context of a growing population and a highly managed water system that includes Lake Shasta. It will be important that Sacramento Valley residents help policy-makers understand what's at stake and the importance of managing Lake Shasta for regional

sustainability of its water resources. California's regulatory system will also need to evolve to help assure reliable and affordable water for all these beneficial purposes within the region.

Like most great public works projects, the management of Lake Shasta will continue to evolve for the next 75 years to reflect new and changing values in our society.

Congratulations to the people in Northern California on this special occasion!

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