

Consequences of Water Management in Bakersfield, CA, during along-lasting drought

“We are all in this together” Are we? The Examples of Truxtun Lake and the Park at River Walk



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Abstract

The City of Bakersfield, Kern County, California, is experiencing an exceptional drought. Situated in the Southern San Joaquin Valley, in a highly developed agricultural environment, most of the water that the Kern River brings to the Valley, primarily from winter snow melts in the Sierra Nevada, is re-directed to agricultural fields and orchards. In addition, urban sprawl is increasing. The City of Bakersfield is challenged distributing the river water to the four water districts which have long established rights to the river. Without water conservation planning by the water districts, or their willingness to share water with the city, there are ongoing difficulties in keeping water in the lower Kern River that flows through Bakersfield. In 2022, the City's Department of Water Resources let several lakes along the Kern River Parkway and a popular park called the Park at River Walk dry up, without regard of animal and plant life which depend on these lakes, thereby also destroying recreational areas for residents during the increasingly hot summer months. The city ignored recommendations by local environmental groups, as well as complaints of residents. The city also showed unpreparedness in a dealing with water shortages during times of drought and was unable to develop and implement a water conservation plan. There also seems to be a violation of the Public Trust Doctrine and several California Fish and Wildlife codes. Consequently, a lawsuit was filed against the City of Bakersfield collectively by several environmental groups.

Keywords: Kern River, water conservation, water shortage, drought, water equity, water conservation plan, public trust, environmental justice

Introduction

The Truxtun Lakes along the Kern River Parkway are easily visible from the Kern River bike path or when driving along Truxtun Avenue in Bakersfield, CA. Both lakes are water recharge lakes to support groundwater recharge in wet years. Their water originates from the Kern River, brought via the carrier canal (Cross Valley canal), and is managed by the city. The last time the lakes were filled with water was in 2016, after an El Niño event dropped enough water over the Southwestern U.S. to fill rivers and lakes. Residents enjoy birding, fishing, and biking along the lakes, year-round. Also, the lakes at Park at River Walk are attractive for families to enjoy the outdoors, especially during the hot summer months (Figure 1 A-E) [1-4]. Like most of the Southwestern U.S., the Southern San Joaquin Valley has experienced an ongoing drought for several years. Therefore, it is surprising that the City

of Bakersfield's Water Resources Department has not developed a water conservation plan which addresses Kern River water use in the Truxtun Lakes and in the lakes at the Park at River Walk. The following timeline shows that the problem of water shortage is not new and ample time was available to develop and implement a water conservation plan.

Timeline

2015

In 2015, the city's Department of Water Resources stopped the flow of water into the smaller Truxtun Lake (Truxtun Lake west) to conserve water during an historic drought to manage Bakersfield's shrinking water supplies. This was announced by the Water Resources Manager, to set an example for area residents,

and was supported by the former City manager, members of the City Council, and former Mayor, after recommendations from the state Department of Fish and Wildlife. Water remained in the larger Truxtun Lake (Truxtun Lake east) which was stocked with

fish, and which is frequented by many bird species. Residents, businesses, and golf courses were asked to preserve water voluntarily [5].



Figure 1: Residents enjoying a walk around the lakes at the Park at River Walk [1] (A). Kids playing in the creek that connects the two lakes at the Park at River Walk [2] (B). Catching fish at the larger Truxtun Lake [3] (C). Kern Audubon birding event around the Truxtun Lakes [4] (D and E).

2019

Even though the water levels in Truxtun Lake east were low, the Water Resources Department released even more water for its annual winter maintenance. The city removed all vegetation from the banks of the lake, including cat tails (*Typha latifolia*) and small shrubs and trees (referred to as weeds) claiming to eliminate erosion that may have occurred over the years, by bulldozing the bottom of the dry lake and removing all vegetation [6]. This measure is in fact counterproductive to erosion because roots are known soil stabilizers [7]. Without success, local organizations, such as the Kern River Parkway Foundation and the Kern Kaweah Chapter of the Sierra Club, pointed out to the Bakersfield City Council repeatedly that this is counterproductive to erosion and negatively affects wildlife.

2022 - Water equity and environment justice

Seven years later, drought conditions continued to worsen. Several excessive and unprecedented heatwaves added to the developing water crisis. Consequently, the city decided to let both Truxtun Lakes, as well as the two lakes at Park at River Walk dry out. Rescuing any animals was not considered. Rainbow trout's, largemouth bass, turtles, and some ducks were left to fend for themselves or die. This action was recommended by a contracted employee from an "environmental consulting company" that the city asked for advice, arguing that these are invasive species. However, it is unclear if a written report was prepared in advance for public review, and available for public review and comment. Residents, becoming aware of what was going on, reached out to the local news to describe the situation that became worse when dead animals started smelling. The city "solved the problem" by bulldozing over the bodies of hundreds of dying fish and buried

turtles that tried to overcome the drought by digging deeper into the remaining mud. These efforts were completed by the beginning of September.

This approach (draining and then bulldozing the bottoms of these lakes) is questionable to advocates for the public usage of these lakes. Local news also reported about the issues arising from the dead animals rotting in the sun [8]. In another news article, Kern River Parkway President Rich O'Neil said, "The fish could have been netted and transferred to another location." He also mentioned the importance of water equity—pointing out that ample water is being available for golf courses during the drought, but lakes such as Truxtun Lakes and the lakes at Park at River Walk are being drained (Figures 2-5) [9]. Attempts to capture and relocate at least some of the Peking ducks that are not able to fly was pursued by private organizations [10]. The city's Public Information Officer explained that the city's available water supplies are being prioritized to the water treatment plants for domestic usage which includes water for drinking, showering, cooking, cleaning, and general use for the growing population in the greater Bakersfield area [11].

We are all in this together – Are we?

On August 5th, 2022, in a meeting attended by representatives from the Kern River Parkway Foundation, Bring Back the Kern, and Kern-Kaweah Chapter of the Sierra Club, the City of Bakersfield's Water Resources Manager committed to improve habitat protection, water management practices (including water conservation measures), tree planting and irrigation along the Kern River Parkway. The commitment included working in collaboration with the City's Recreation and Parks Department and other City departments, California State University Bakersfield,

and the Kern River Parkway Foundation [12]. In early September, activists from local environmental groups expressed several concerns about the city's priorities and management practices which led to these lakes purposely being drained. The result is that public lakes which support wildlife and are frequented by Bakersfield residents to escape the heat and enjoy the outdoors are abandoned. The City of Bakersfield's promise that water would be added back into the lower lake at Park at River Walk on Saturday, Sept. 3rd [10], was not kept. Water levels were further

shrinking (personal observation), (Figure 2) until complete evaporation shortly after. Until now (December 2022), there has been no follow-up by the city regarding their commitment to collaboratively develop and implement sustainable water management practices. To avoid habitat loss for wildlife, loss of recreational opportunities for residents, and to prevent needless animal suffering, the following recommendations were compiled by the authors and shared with city officials:



Figure 2: The lower lake at the park at River Walk on September 7th (A) and on September 16th, 2022 (B). The lower lake is drying out, contradicting the city's claims to keep water in the lake.

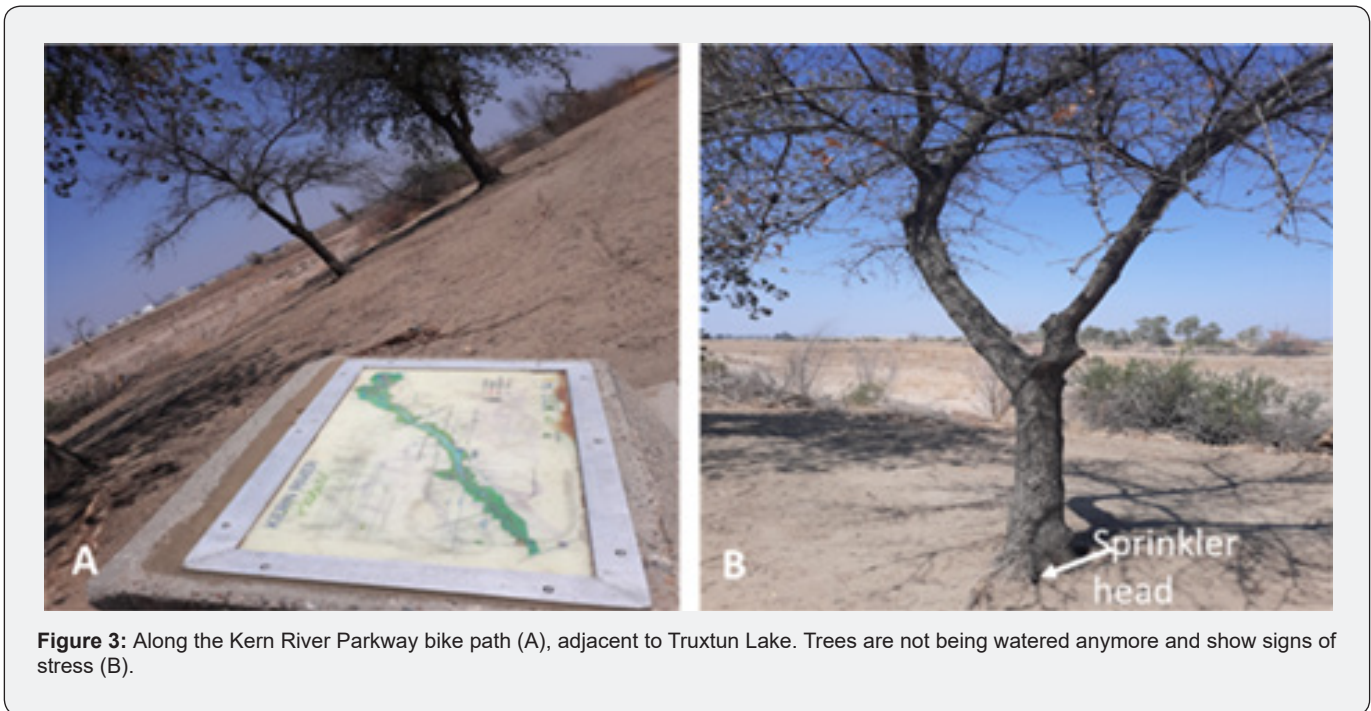


Figure 3: Along the Kern River Parkway bike path (A), adjacent to Truxtun Lake. Trees are not being watered anymore and show signs of stress (B).

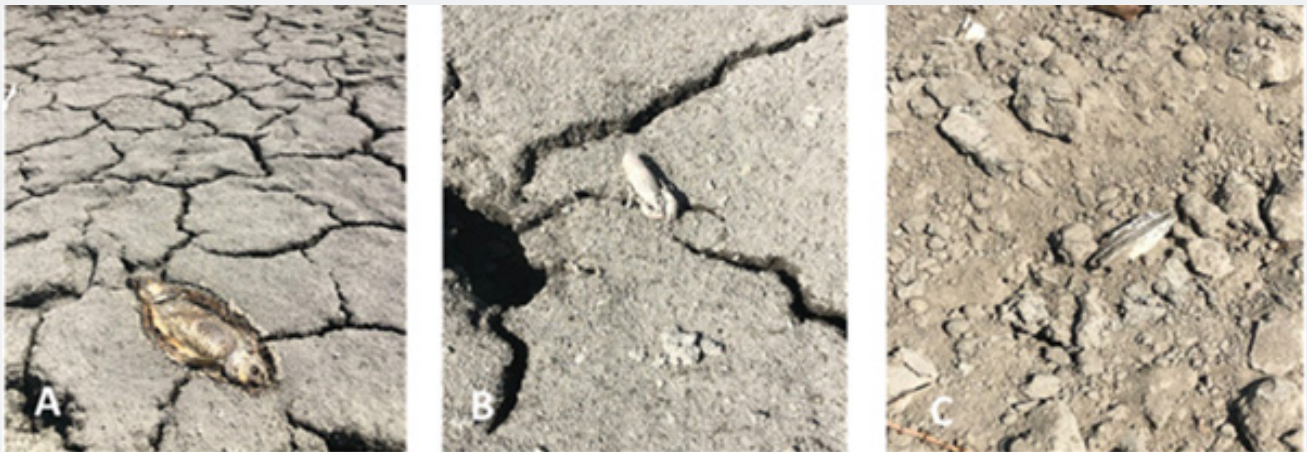


Figure 4: Besides fish, also invertebrates (crayfish, shells) died from the drying of the lakes at Park at River Walk (A and B) and Truxtun Lake (C).



Figure 5: Truxtun Lake on September 16th, 2022, after all dead and dying animals were bulldozed into the ground (A and B). Same day, a lake at Seven Oaks Golf Course, less than two miles from the Kern River, is filled completely. Greens are not required to implement water conservation measures and the four lakes at Seven Oaks Golf Course (private lakes), remain completely full for the private use of golfers (C).

A Water Conservation Plan needs to be developed that addresses the following topics:

a) Water equity and environmental justice for residents and wildlife

b) Sustainable water management practices for the next decades

- i. For wildlife
- ii. For agriculture
- iii. For residents
- iv. For businesses
- v. For parks
- vi. For schools and other public entities

c) Prevention of water wasting practices

- i. Water metering
- ii. Transparency of water management
- iii. Improve recycling and wise usage of water
- iv. Fines on water wasting or caps on water usage, for all

d) Expert advisers with diverse backgrounds to support decision making and policy development by City/County

- i. Qualified personnel on water board and other committees

e) Collaborations for finding solutions with other cities in the Central Valley/Counties

- i. Lessons learned

- ii. Successful practices
- iii. Identification of obstacles and problems
 - f) Smart ground water recharge by allowing the water to flow through the lower Kern River

Education

- a) On the value of trees and waterways to remediate urban heat, capture carbon, and support wildlife
- b) On environmental ethics, justice, and responsibilities
- i. Nature, biodiversity
- ii. Disadvantaged communities
- c) On long-term benefits of sustainable actions to the community and ecosystems
- d) Investment in long-term (sustainable solutions), avoid short-term fixes that don't solve the problems

Current Status

After months of hearings by the State of California Water Board, the state has failed to take any action on the request to allow the continuous flow of water in the lower Kern River, so that a portion of the water remain in the riverbed for the enjoyment and recreation of the people. Furthermore, meeting the needs of birds and other animals and retaining riparian vegetation have not been considered. The process of allowing 100 % of water diversion to the irrigation districts continues. Consequently, a lawsuit was filed in Kern County on November 30th, 2022, by Kern Audubon, the Kern River Parkway Foundation, the Sierra Club Kern-Kaweah Chapter, and California Water Audit, against the City of Bakersfield which has the responsibility of distributing water from the Kern River to the irrigation districts. The court is being asked to apply current historic laws (Public Trust Doctrine, California State Constitution Article X, and several California Fish and Wildlife codes) to remedy the problem. The remedy sought would require those entities that take the water to release a portion to the metropolitan section of the river [13]. This lawsuit

is following other lawsuits to restore the flow of rivers, that have been filed in the past, such as the Putah Creek in Northern California, the Salinas River, the Carmel River, and San Clemente Creek in Southern California [14]. Legal action might be needed to force public administrations to act on behalf of the people and to serve environmental justice. The case of the lower Kern River and the lakes it supported in the past, as shown here continues. Protecting and advancing the inherent rights of rivers to exist and for people to enjoy and wildlife to thrive is crucial.

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