STATEMENT OF THE
CALIFORNIA FARM BUREAU FEDERATION (CFBF)
for the
U.S. HOUSE NATURAL RESOURCES
SUBCOMMITTEE ON WATER AND POWER
Regarding
"CREATING JOBS BY OVERCOMING MAN-MADE DROUGHT:
TIME FOR CONGRESS TO LISTEN AND ACT

Monday, April 11, 2011
Fresno, California

Background
California has a varied hydroscape and topography, but most areas have a semi-arid climate characterized by a short season of snow and rain which typically does not coincide with the agricultural growing season. In addition, 75 percent of the state's water originates in the top one-third of the state, while the majority of the population resides in the southern two-thirds of the state. As a result, the storage, diversion and use of water is a complex system of physical infrastructure, as well as a sophisticated regime of law and policy. In some areas, water is diverted directly from surface watercourses or pumped directly from groundwater basins. In the larger majority of cases, water is developed and available for distribution as a result of major federal, state and local projects which both impound water and distribute it to large service areas.

Our statewide water storage and delivery system has not been significantly improved in 30 years. Yet, our population continues to grow; at 38 million people today, California's population is predicted to reach 49.2 million by 2030 and 59.5 million by 2050. There is also a growing demand for environmental uses of water, which can be unilaterally imposed by laws such as the Endangered Species Act. Agricultural water users continue to do their part by implementing highly efficient irrigation practices. The current distribution of developed water in California is as follows: 48 % to the environment, 41% to food/farming, and 11% to urban use.

Our current water system has a finite supply and a growing demand. The status quo is no longer sufficient. We need improved infrastructure to store, transfer, and deliver water where it's needed, when it's needed throughout the state in order to improve the business climate, ensure food safety & security and provide environmental benefits.

Delta Ecosystem
The Sacramento-San Joaquin Delta, located near Stockton, is the hub of California water management and a vital aquatic ecosystem. Flows from the Sacramento, San Joaquin, Calaveras, Cosumnes, and Mokelumne rivers run through the Sacramento San-Joaquin Delta where they mix with the tidal estuary. These rivers and the channels and levees within the Delta are some of the major water conveyance systems of California. From

the Delta, these waters then flow through the Carquinez Straits at Vallejo, into San Francisco Bay, and out under the Golden Gate to the Pacific Ocean.

The Delta ecosystem encompasses 1,600 square miles, drains over 40 percent of the State of California, and provides habitat to numerous species of fish and wildlife. The complex system of levees allows land to be farmed, and helps protect the water-export facilities from saltwater intrusion. Key water export facilities for both the State Water Project (SWP) and Central Valley Project (CVP) are located at the southern end of the Delta.

Increasing demands and stressors have caused many changes to the ecosystem. Debates are being held in many forums regarding how to best balance the Delta for environmental, urban, and agricultural uses throughout the state.

ESA – Not A Sustainable Approach

The Endangered Species Act (ESA) was passed in 1973, with the intent to "provide for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend." Since the Act began, 1300 species have been listed as threatened or endangered, while only 10 have ever been recovered. That's a 1% recovery rate.

Critical habitat designations and other prescriptive regulations of the Act place numerous restrictions on how farmers can use their land. Besides being ineffective at recovering species, this creates a disincentive for landowners to assist with species conservation. These structural problems in the ESA make it clear that it is time to update and modernize the Act to better recover species, minimize conflict, reduce costs, and remedy other unintended consequences of the Act.

Key improvements needed include:

- ✓ A focus on cooperative conservation and landowner incentives. Family farmers and ranchers are key to the recovery of species, especially since at least two-thirds of endangered species live on private lands. This is particularly significant in the West, where fifty-percent of the land is owned by the government.
- ✓ Science needs to be used more appropriately. The U.S. Fish and Wildlife Service continually affirms that critical habitat designations are not an effective means by which to recover species. Critical habitat designations need to be replaced by comprehensive recovery plans that include the use of adaptive management.
- ✓ Use of Adaptive Management, which allows the science on which a decision to protect and recover species is based to change over time with new research. This law would have the ability to modify and adapt species recovery plans as science advances and new information becomes available.

Over time, the ESA has become a "species-first, people-last" federal statute routinely enforced by environmentalist lawsuits. In the first U.S. Supreme Court case testing the ESA's scope and authority (*Tennessee Valley Authority v. Hill*, 1978), the court majority declared that "(t)he plain intent of Congress in enacting (the ESA) was to halt and reverse the trend toward species extinction, *whatever the cost*." (emphasis added) This decision

continues as judicial precedent of a taxpayer-funded program without financial restrictions.

The result has been twofold: One, the lower federal courts nearly always treat the ESA as a super statute that elevates species preservation above all other socially beneficial public interests; and two, the incessant ESA-based lawsuits filed by environmentalist organizations are nearly always successful (which in turn allows them to collect their attorney fees from the taxpayers.)

The Challenge (Timing of South-of-Delta Water Deliveries)

Background on the Delta Smelt and the Pumps

The Delta Smelt, an endangered species that exists only in the Delta ecosystem, has become the symbol of why the ESA is not a sustainable approach to balancing economic, environmental, and social concerns.

This 2-3 inch fish lives in brackish water, and therefore depends on the proper balance of freshwater and saltwater. Other factors that make the Smelt environmentally sensitive are their one year life cycle and limited diet, which consists only of zooplankton. Because of declining populations in previous years, environmental groups sued in 2006 to upgrade the Smelt's listing from threatened to endangered.

As mentioned earlier, the Delta is also the hub of California's complex water system. At the southern end of the delta, near Tracy, the CVP and SWP operations require water to be pumped upgradient. These large pumps can trap and kill fish. Because the Delta Smelt are a listed species, BOR and DWR (the agencies operating the pumps) had to request a permit to operate the pumps from the U.S. Fish and Wildlife Service (USFWS). In 2005, USFWS granted the agencies a permit, determining that the water projects would not jeopardize the continued existence of the smelt.

As expected, environmental groups challenged the opinion, arguing that the pumps were the primary cause of the smelt's decline. Mindful of the ESA's mandate to preserve listed species "whatever the costs," in late 2007, federal district Judge Oliver Wanger of Fresno ordered the state and federal pumps shut off whenever young smelt were in the vicinity. This ESA-driven ruling reduced Delta water exports through the pumps by 30 percent during 2008 and caused an estimated hit to the state's economy of $300 million.

In addition to the Delta smelt lawsuit, environmental groups brought another, ultimately successful challenge to overturn a 2004 salmon and steelhead biological opinion by the National Marine Fisheries Service (NFMS). Salmon and steelhead are also endangered species, impacted by the coordinated operations of the CVP and SWP pumps in the south Delta.

As a result of the Delta smelt and salmon lawsuits, USFWS and NMFS were compelled to prepare new biological opinions for the affected species. These new biological opinions were completed in December 2008 and February 2009, respectively. These

documents significantly restricted the operation of the pumps at the south Delta water export facilities.

Despite years of work by federal and state wildlife agencies to determine the cause of and reverse the Delta smelt's decline, little success has been achieved. The Delta smelt is a frail species has been in decline for over 35 years and will likely become extinct from several causes no matter how much effort or funds are expended to preserve it.

This, then, is where one must consider the economic and social impacts – which in this case are immense – of trying to preserve such a species.

When Water Is Needed

The Biological Opinions for the smelt and salmon restrict when and how much water can be pumped through the Delta pumps. Unfortunately, these restrictions apply at times of the year that are essential for crop irrigation. Equally as unfortunate, is the timing of when farmers south of the Delta are informed of how much water they can expect. If they don't know early enough to plan ahead, the water is of little to no use.

For farmers south of the Delta, most major cropping decisions - what to grow and how much of each crop to plant - are made in the late fall of the year proceeding the new crop year. Below are a number of factors that depend on a known water supply:

- Most farmers do field work in the fall in preparation for the next crop year.
- Seeds or bedding plants must be ordered for the various crops in the fall to early winter. For example, those who don't make cotton planting decisions early enough, are often not able to secure the needed amount of cotton seed, or the desired seed variety.
- In a normal rainfall weather year some pre-irrigation of the prospective crop is done as early as January or February. Early planted tomatoes go into the ground as early as the first part of March.
- Some crops, such as wheat and alfalfa, are fall planted for harvest the next year as early as April/May. Wheat that is planted in the fall gets a "free" irrigation ride throughout the winter and into the early spring, but then typically must be irrigated in late March or April to bring the crop to a successful harvest. So, even if the water needs are small overall, knowing that there will be water available in late winter/early spring is critical for planting decisions.
- Bank loans for annual operating expenses are executed from late fall to early spring, so securing a bank loan - and the ability to re-pay it - is contingent upon having a known water supply as early as possible.
- Many crops are grown on contract with a processor - contracts are offered by processers between crop years so a producer must be in a position early enough to commit (typically early winter).
- Westside farmers have increasingly invested in drip irrigation to more efficiently grow crops such as processed tomatoes, cotton and melons. This consists of drip tape buried in furrowed beds. The tape is left in place for 4-7 years which is the life of the tape. Once the tape is put in place, the size/type of bed determines

which crops can be planted for the full duration of the tape use (4-7 years), so you don't readily change crops. The drip tape costs roughly $500-800 per acre to install with other annual operating expenses (a fairly substantial investment for the value of crops grown) to be amortized over the life of the tape.

- Future investment and hiring decisions – deciding whether to plant a perennial crop vs. an annual crop, what investments to make in equipment, advance purchases of fuels or fertilizers at an opportune market time, how many people to employ, what infrastructure to invest in, etc.

Last year, and to a certain extent this year, planting decisions were not made or were forestalled due to the uncertainty of water availability. In other words by March or early April it's really too late to make meaningful planting decisions. Therefore, in some cases, especially the previous two years, ground was fallowed that would otherwise had been planted if it was known early enough that water would be available.

In summary, farmers fare best with early information on their water supplies (ideally in the fall preceding the crop year) and they fare best with a stable and predictable supply of water, without year-to-year surprises or fluctuations. Also in making decisions between which crop to grow, the best water supply information helps them to make the best economic decisions, based on known market prices or in the case of cotton, the futures market. March is really too late to make these decisions in a prudent manner.

Spring 2011 Situation

The beginning of 2011 has demonstrated the frustration of pump restrictions even in a year of abundant snow and rainfall. So far, CVP south-of-Delta contractors are projected to receive just barely over half of their full contract entitlement. This allocation forecast shows how broken California's water delivery system is. In a year that is on track to be one of the wettest years on record, with flood releases already occurring from the Project's own reservoirs, it is a sad commentary that Reclamation can forecast only a 45 percent allocation. This is further evidence that if we are going to sustain the economy of this state, we have to fix the Delta problem. Until we improve California's delivery facilities, we will continue to be water short throughout the state.

2009-1010 Regulatory Drought Impacts

The term "regulatory drought" is used in contrast to a "natural drought," where Mother Nature has simply not provided enough water to grow crops and water livestock. A "regulatory drought" is distinctly different, in that Mother Nature has provided adequate water, but this water is not accessible due to regulatory restrictions. In this case, it was the biological opinions for the Delta smelt and salmon that restricted when water could be pumped south of the Delta. So, while rainfall was average, contract holders south of the Delta received only a fraction of their allotment entitlement.

2009 found California in the perfect storm of increasing urban demand, a third consecutive year of natural drought, and rigid, lawsuit-provoked rigid implementation of the ESA through Biological Opinions for the Delta smelt and salmon.

In combination with an on-going three-year drought, pumping restrictions imposed by the biological opinions resulted in drastically reduced water deliveries to some 2.5 million acres of highly productive farmland and 23 million Californians in areas of the State located south of the Delta. Despite a third year of statewide diminished precipitation, rainfall into the San Joaquin River's and the Sacramento River's northern California watersheds (which serve the state and federal water projects) were close to, or at, normal levels. Yet, instead of this water being released to the pumps for export to people's use, according to the San Luis and Delta- Mendota Water Authority, as of March 15, 255,802 acre feet (beyond that required to prevent excessive salt-water intrusion from San Francisco Bay) were allowed to flow to the ocean to comply with the ESA-mandated Delta smelt ruling.

The natural drought accounted for 1.6 million acre feet of reduced water deliveries, while the ESA regulations for the smelt and salmon caused an additional loss of 500,000 acre feet.

A revised University of California, Davis study shows the dire results of the 2009 drought: 500,000 acres of productive farmland idled, 40,000 San Joaquin Valley jobs lost, $1.6 - $2.2 billion revenue lost, and unemployment rates as high as 40 percent in some San Joaquin Valley communities. UC Berkeley professor Dr. David Sunding estimated the average economic effect of protecting the Delta smelt will exceed $1 billion, and may reach $3 billion through lost crops and more expensive water.

The social and economic impacts have been huge. Probably the most notable is the loss of farm-related jobs in the Central Valley. Unemployment rates in Central Valley towns such as Mendota reached forty percent. Perhaps the saddest irony was the over-taxed food lines in communities throughout this area otherwise known as "the breadbasket of the world."

Fishermen vs. Farmers

Fishermen and farmers are both family-run small businesses that have been negatively impacted by implementation of the current ESA. While both groups have their extreme ends, the middle majority face the same challenges. We do not believe it is effective to pit one group against the other in the debate over water. As representatives of all types of food production, CA Farm Bureau represents both fishermen and farmers.

Solutions

We need a combination of solutions, including new surface water storage with continuous appropriation, area of origin water rights protections, improved conveyance, and Delta ecosystem improvements. This holistic solution approach will provide water supply reliability for our growing population, vital environmental protection, and our farmer's ability to continue growing our own safe and nutritious food supply. Some specific recommendations include:

- Seek actions by the Interior Department to relieve short-term water delivery problems caused by conflicts over endangered species fish protection and other flow restrictions
- Work on long-term solutions, including the Bay Delta Conservation Plan (BDCP) and improved infrastructure and flexibility for water storage and delivery
- Update the Endangered Species Act (ESA) so species protection is balanced with water needs and the ability to produce a domestic food supply
- Allow active thinning (remove 18% of biomass) of our productive National Forests (those lands not reserved), to provide *3.3 million acre-feet of additional water supply for the state of California*, as well as limit impacts of catastrophic wildfires, such as erosion, degraded water quality, destroyed habitat, and immense carbon emissions
- Address other stressors, such as the growing population of striped bass and other nonnative fish that pretty on smelt and young salmon. Other potential stressors include urban runoff, wastewater discharges, etc.

Why California Needs Farmers

California needs farmers because agriculture in this state maintains jobs and generates income; ensures a safe, abundant and affordable domestic food supply; creates positive trade, protects our landscapes, uses water efficiently to produce local food, fiber, and nursery products.

- *California Agriculture Maintains Jobs and Generates Income*
  - One in ten jobs in California is tied to agriculture (i.e., production, processing, transportation, marketing or export activities).
  - Farm exports represent 40 percent of the cargo leaving the Port of Oakland.
  - Agricultural exports represent significant business volume in the Ports of LA and Long Beach.
  - Farm products add value as they move through the processing and marketing chain. Products such as wine and nursery products increase in value to create added jobs, income and tax revenue.

- *California Agriculture Ensures a <u>Safe</u>, <u>Abundant</u> and <u>Affordable</u> Domestic Food Supply*
  - *SAFE:* California produces the freshest, safest food supply in the world. Our producers comply with the highest food safety and environmental standards found anywhere.
  - *AFFORDABLE:* The United States has the lowest consumer food costs anywhere in the world---less than 10 percent of our disposable income. On average, farmers receive just 19 cents out of every dollar spent on food.
  - *ABUNDANT:* A thriving, productive agriculture bolsters our nation's security, which is in sharp contrast to our dependence on foreign oil and gas.
  - *NUTRITIOUS:* California will play an important role in enhancing school nutrition by supplying more fresh fruits and vegetables for school lunches and snacks. We produce one-half of the country's fruits, vegetables, and nuts.

- *California Agriculture Creates Positive Trade*
  - The on-farm value of California's agricultural exports exceeds $10 billion and the final export value is many times greater. For every $1 billion in exports, 27,000 jobs are created.
  - Our nation's agriculture enjoys a positive world trade balance, thanks largely to California. California leads the nation in agricultural exports, with $10.9 billion in exports to 156 countries worldwide.

- *California Agriculture Protects Our Landscapes*
  - A strong and viable agriculture enhances and protects our environment.
  - California farm and ranch lands provide important open space, habitat and landscape attributes that Californians enjoy.

- *California Agriculture Uses Water Efficiently to Produce Local Food, Fiber, and Nursery Products*
  - The Central Valley contains the world's most fertile soils and favorable growing conditions.
  - Rural California communities depend on water for growing crops and maintaining jobs.
  - From 2003 to 2008, Central Valley farmers invested more than $1.5 billion in irrigation systems to improve water use efficiency.
    - Farmers pay the cost of pumping or purchasing water from a supplier.
  - Comparing similar rainfall years (1967 and 2000), agricultural water use increased 9%, while agricultural production increased 89% by volume.
  - Water allocations: Environmental use: 48 percent; Agricultural use: 41 percent; Urban use: 11 percent
  - California's population, currently around 37 million, is the largest in the country and is expected to reach 59 million by 2050. Our water delivery system was built 50 years ago when the state's population was 16 million. Improved storage and conveyance is crucial to efficiently moving water to where it is needed, when it is needed. We must act to assure supplies of water for producing food, while meeting the needs of residents from the north to the south as well as fish and the environment.

Conclusion

All of us as California residents have a stake in solving our state's water challenges. We must take actions that will allow us to continue producing food, while also providing water for residents from the north to the south as well as species and the environment. Because of California's unique location between the Sierra Nevada mountains and the Pacific Ocean, we believe solutions to our state's water crisis can be found.