Introduction:

Over the course of the past several weeks, since the last Drought Task Force update to your Board on July 20, 2021, observed conditions of drought have proven to be substantial and harmful both to human health and the natural environment. This report summarizes recent observed instances of drought conditions in Humboldt County and surrounding communities as well as an update on the scope of work regarding a local groundwater assessment and well permitting process.

Public Health Impacts:

On July 23, 2021, the DHHS Public Health Branch issued a press release concerning the impacts of harmful algal blooms in the Eel River after a report was made of an individual becoming ill following time spent in the South Fork Eel River north of Weott. This report came only days after testing confirmed cyanobacteria, also known as blue-green algae or harmful algal blooms (HABs), was found at a location in the main stem of the Trinity River east of Willow Creek, likely contributing to a dog's death earlier in July. Subsequently, on July 27, 2021, Trinity County Environmental Health informed us that a second dog death was reported after recreating in the Trinity River in the area of Big Flat. Though this incident was reported in Trinity County, it is reasonable to expect that local conditions in Humboldt County could precipitate similar HABs. Recent results for Cooks Valley in Humboldt County show elevated Anatoxins in algal mats. Results for Standish Hickey State Recreation Area in Mendocino County also are high in Anatoxins. The Women's Federation Grove (Grove) Anatoxin results were lower; cyanobacteria was not as prevalent.

Environmental Health will post CAUTION at locations from Standish Hickey to Richardson Grove and will continue with CAUTION signs at the Women's Federation Grove due to the suspected illness.

Unseasonably low flows along several local rivers, including the South Fork Eel, Van Duzen and Mad Rivers, coupled with sustained high temperatures in the inland areas and low rainfall have created suitable conditions for rapid growth of harmful algae.

Due to the challenges associated with testing the many miles of local rivers and unpredictability of HABs, it is best to assume that any algal bloom present in local waterways has the potential to contain toxins.

With the high prevalence of algal blooms in Humboldt County, the following guidelines are recommended for recreational users of all freshwater bodies:

- Keep children, pets and livestock from swimming in or drinking water containing algal scums or mats.
- Adults should also avoid wading and swimming in water containing algal blooms. Try not to swallow or inhale water spray in an algal bloom area.
- If no algal scums or mats are visible, you should still carefully watch young children and warn them not to swallow any water.

- Fish should be consumed only after removing the guts and liver and rinsing fillets in tap water.
- Never drink, cook with or wash dishes with water from rivers, streams or lakes.
- Get medical attention immediately if you think that you, your pet or livestock might have been poisoned by cyanobacteria toxins. Be sure to tell the doctor or veterinarian about possible contact with cyanobacteria or algal blooms.
- Join or support one of the many watershed and river organizations

Boil Water Notices – Water Shortages:

On July 22, 2021, Klamath Community Services District was placed under a Boil Water Notice due to problems with their drinking water storage tank. Though this is not a drought related notice, it has created a need to stockpile emergency water supplies in an attempt to provide residents with potable drinking water during a year when excess water is not readily available and some areas of California are experiencing substantial water shortages. On July 27, 2021, the California Governor's Office of Emergency Services (CalOES) provided Humboldt County OES with information relating to water donations being offered to local jurisdictions, namely counties and tribes, by two of the United States' largest bottled water manufacturing companies. Donations such as these have the potential to augment drinking water supplies in areas of the state that are most severely impacted by drought. The County is not currently planning to request access to this supply since we are not experiencing or anticipating substantial impacts to residential water supply, however, this information has been provided to several tribal contacts in areas of Humboldt County that are most at risk of drought related impacts.

Scope of Work for Well Permitting Process:

In the Drought Task Force's presentation at the July 22, 2021 Board meeting, the initial development of a scope of work related to groundwater supplies and the water well permitting process was discussed. The task force agreed that the scope of work should be developed in a phased approach, with two separate tasks, initially. The first task will be comprised of conducting an assessment of groundwater resources. This will likely require the assistance of technical experts and/or hydrogeologists to discuss groundwater sustainability and hydrology. The second task is to develop a well permitting regulatory framework and process to protect groundwater resources and transparent permitting requirements. Members of the task force have been assigned various tasks to support the development of this scope of work, such as reaching out to neighboring counties, including Mendocino and Sonoma Counties, for examples of similar efforts. Additional assignments were to invite a hydrogeologist to one of our upcoming Drought Task Force meetings to begin discussions around the creation of the scope of work and all required hydrology and sustainability information that needs to be examined throughout the future work period. Future tasks include developing a budget and funding plan.

Impacts of Illegal Cannabis Cultivation:

In addition to the previously mentioned public health impacts of drought being observed in Humboldt County, the Sheriff's Office Marijuana Enforcement Team (MET) recently served 23

search warrants to investigate illegal cannabis cultivation in four of Humboldt County's watersheds. This investigation found that in the Redwood Creek, Steelhead/Powers Creek, Salmon Creek and Roach/Tulley Creek watersheds, water flow is being impacted due to illegal cannabis cultivation. These watersheds are home to protected species such as Coho and Chinook salmon, as well as Steelhead trout, all of which are faced with tremendous habitat challenges due to drought conditions.

Illegal water diversions and water theft for marijuana cultivation sites are widespread and harmful to the local ecosystem. The practice of illegally diverting water for marijuana cultivation is contributing to already stressed water systems by fragmenting local fish habitat, adding additional sediment/debris to creeks, streams and rivers, and contributing to reduced water availability in some areas.

The Humboldt County Sheriff's Office, along with our local and state partner agencies are committed to continued enforcement of illegal growing operations and associated illegal water diversions and water theft.

Conclusion:

With the drought now being recognized as a countywide emergency, it is essential that we are able to gather information from various stakeholders regarding observed impacts in order for us to develop a mitigation and response strategy using a whole community approach. Observed impacts of drought in Humboldt County are mounting. This task force will continue examining local drought impacts and making recommendations for mitigation and response actions as well as potential policy decisions to reduce current and future degradation of our ecosystems and community health.

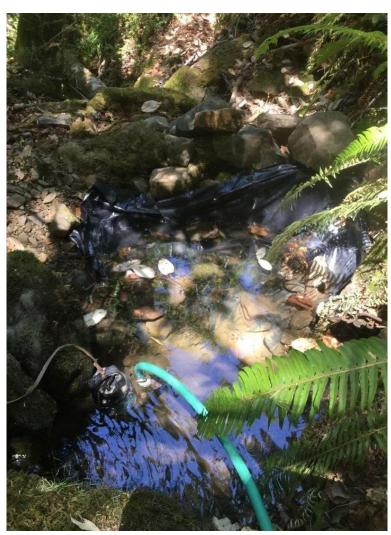
Impacts observed during the recent MET/allied agency investigation:

1. Redwood Creek Watershed

On July 19, 2021, teams served seven warrants on parcels in the Redwood Creek Watershed. During the service of the warrants, deputies eradicated approximately 17,082 growing cannabis plants. Deputies seized and destroyed over 618 pounds of cannabis bud and over 3,580 pounds of processed cannabis.

Assisting agencies found the following violations:

- Twelve (12) water diversion violations (up to \$8,000 fine per day, per violation);
- Three (3) water pollution violations (up to \$20,000 fine per day, per violation);
- Four (4) depositing trash in or near a waterway violations (up to \$20,000 fine per day, per violation).



Dammed up creek with 100 percent of water being pumped out for Illegal cultivation. Juvenile salmonoids located in pool.



Garbage spread out next to Redwood Creek watershed.

2. Steelhead/Powers Creek Watershed

On July 20, 2021, teams served eight warrants on parcels in the Steelhead/Powers Creek Watershed. During the service of the warrants, deputies eradicated approximately 8,918 growing cannabis plants. Deputies seized and destroyed over 17 pounds of cannabis bud and over 1,310 pounds of processed cannabis.

Assisting agencies found the following violations:

- Twenty-three (23) water diversion violations (up to \$8,000 fine per day, per violation);
- Nineteen (19) water pollution violations (up to \$20,000 fine per day, per violation);
- Sixteen (16) depositing trash in or near a waterway violations (up to \$20,000 fine per day, per violation).



Eight-foot deep hole dug into creek bed diverting 100 percent of waterflow to illegal cultivation.



Cooking shack and garbage spread about.



Creek dammed up and 100 percent of flow being diverted to Illegal cultivation.



Creek dammed up and 100 percent of flow being diverted to Illegal cultivation



Illegal grading and commercial cannabis cultivation.

3. Salmon Creek Watershed

On July 21, 2021, teams served four warrants on parcels in the Salmon Creek Watershed. During the service of the warrants, deputies eradicated approximately 2,205 growing cannabis plants.

Assisting agencies found the following violations:

- Six (6) water diversion violations (up to \$8,000 fine per day, per violation);
- Two (2) water pollution violations (up to \$20,000 fine per day, per violation);
- Four (4) depositing trash in or near a waterway violations (up to \$20,000 fine per day, per violation).



Dammed up Salmon Creek with bump in creek diverting 90 percent of waterflow. Juvenile salmonoids located in pool.



Ninety percent of waterflow being diverted from waterway.

4. Roach /Tulley Creek Watershed

On July 22, 2021, teams served four warrants on parcels in the Roach /Tulley Creek Watershed. During the service of the warrants, deputies eradicated approximately 6,922 growing cannabis plants. Deputies seized and destroyed over 55 pounds of processed cannabis.

Assisting agencies found the following violations:

- Six (6) water diversion violations (up to \$8,000 fine per day, per violation);
- Two (2) water pollution violations (up to \$20,000 fine per day, per violation).



Multiple discarded fuel tanks at illegal cultivation site.



Active water diversion with pump.



 $Water\ pump\ diverting\ water\ from\ a\ creek.$



Ponded water from illegal diversion.



Point of diversion at a dried up creek.



Multiple water storage containers, a generator and a discarded gas can.



Multiple water storage containers suspected to be filled through illegal water diversion.



A water container, filled through illegal water diversion, and a fuel-powered pump.



Significant water diversion causing a creek to run dry.