

Memorandum

DATE: October 25, 2017
TO: Khalid Bazmi, County Engineer/Assistant Director
FROM: Kevin Onuma, Deputy Director, OC Operations and Maintenance 
SUBJECT: Santa Ana River Operations and Maintenance Concerns

This Memorandum is to briefly summarize the ongoing difficulties Orange County Public Works ("OCPW") has faced from the growing encampments present in and along the Santa Ana River and other portions of Orange County Flood Control District's ("OCFCD") flood control channel network.

OCFCD was created by the Orange County Flood Control Act ("Act"). The Act requires that OCFCD undertake and make use of its lands for flood control, water reclamation, and water-reclamation activities. OCPW personnel and contractors regularly perform construction and maintenance activities on behalf of OCFCD, on OCFCD property, pursuant to OCFCD's responsibilities under the Act. Part of those responsibilities include ensuring that OCFCD's channels are at all times suitable for the control of flood waters that are discharged into them from various sources, including from Prado Dam and the Santa Ana Mountains drainage basin, and also protecting the quality of waters in those channels.

The Act also permits the Board to permit certain activities on OCFCD property upon a finding that those activities will not interfere with OCFCD's flood control, water reclamation, or water quality operations. For example, OCPW, with the assistance of various cities and OC Parks, maintains a series of recreational trails on OCFCD property. These recreational trails were authorized by a Resolution of the Board in 1972 (see Resolution 72-739). The Board has not made findings that encampments such as those currently present on OCFCD property are a use of flood control property that will not interfere with the flood control, water reclamation, and water quality-related activities mandated by the Act. It has become increasingly apparent that these encampments actually negatively impact OCFCD's statutorily mandated activities, and that despite its efforts, there are no reasonable measures that OCPW can take to completely mitigate those negative effects on its duties.

Over the past two to three years, several large encampments of persons experiencing homelessness have grown at various locations on OCFCD property, particularly in areas adjacent to recreational trails. The largest of these encampments is located adjacent to the recreational trail south of the Honda Center, on the western bank of the Santa Ana River. These encampments on OCFCD property located throughout the County have negatively impacted flood control operations and maintenance activities required to ensure the integrity of flood control channels. They have increased workload and costs, delayed flood control related maintenance activities, and created new safety concerns for the general public and work crews.

The following lists describe some of the impacts the presence of the encampments has had on OCFCD's operations as documented and observed by OCPW personnel. These lists are not intended to be

exhaustive of all challenges and impacts related to or caused by the growth of encampments on OCFCD property, but rather illustrative of those challenges and their impacts on OCFCD's flood control, water reclamation, and water quality related activities.

Impacts to flood control infrastructure include but are not limited to the following:

- **Displaced riprap:** Riprap (large rocks) are often placed or grouted into place on the slopes of some earthen portions of flood control channel levees. This assists in protecting channel integrity by reducing erosion to channel slopes from flowing water and other sources. OCPW personnel have observed locations where riprap armor has been removed from the slopes of the channels and large rocks are present in encampments that appear to have been removed from the channel slopes. Displaced riprap needs to be replaced to ensure the integrity of the levees during storm conditions. The Santa Ana River has been inspected by the U.S. Army Corps of Engineers as a part of their Levee Safety Program and in areas where improvements do not match the conditions shown on record drawings, the Corps has identified such deficiencies that must be corrected.
- **Holes dug into channel banks:** OCPW personnel have observed holes dug into the earthen portions of levees. In a similar manner to displaced riprap, holes, and other mechanical weakening of the structure of the levees presents a threat to the stability of the levees, particularly during storm events where there is a large volume of water flowing through the channel.
- **Increasing amounts of trash, debris, and hazardous waste:** OCPW personnel have observed an increased amount of debris and other waste in and around OCFCD's channels that correlates with the growth of the encampments. This includes human waste, animal waste, used hypodermic needles, trash, debris, and other items and substances that must be regularly removed from OCFCD property to prevent contamination of the channels. OCPW has provided regular pickups of human waste, trash, and hypodermic needles from the encampment areas, but the cost of doing this, both in financial terms and in terms of required labor, has continued to grow. Furthermore, these efforts have not fully prevented waste and debris from entering the channel system, which presents a growing threat to the quality of water flowing through OCFCD's channels.
- **Blockage of flow paths and/or obstructions in underground flood control facilities:** In addition to water quality concerns, buildup of debris in OCFCD's channels can present a threat to the ability of those channels to carry water by, among other things, obstructing grates, blocking pipes, and otherwise interfering with the flow of storm water. OCPW has observed an increase in which such debris has entered the channel system that corresponds with the growth of the encampments.
- **Fires under bridges or in underground facilities:** Fires occurred under the First and Fifth Street bridges over the Santa Ana River as well as other areas in the County.
- **Damaged flood monitoring cameras:** The cameras along the Santa Ana River downstream of Orangewood Avenue and downstream of the I-5 Freeway were vandalized and repair/replacement of equipment is required.
- **Holes cut into fences and damage to vehicle gates, vandalized/removed chains and locks:** Correlating with the growth of the encampments, OCPW has observed an increase in incidents of damage to its vehicular access gates and security fencing around OCFCD channels. This compromises OCFCD's ability to protect its infrastructure, and protect people from entering potentially unsafe areas, such as the bottom of the flood control channels.

The growth of the encampments on OCFCD property has resulted in an increased workload and corresponding increase in financial expenditures on tasks and projects beyond normally required flood control activities. In general, routine maintenance of flood control facilities should be required only about twice a year, prior to and after the storm season. However, due to the growth of these encampments, repeated cleanup activities have been needed on a full-time basis to address the aforementioned damage and waste and debris removal. The number of complaints and requests from the public about encampment related issues has also increased in proportion to the growth of the encampments, which results in more staff time to inspect areas, address issues, and communicate the results of those activities with constituents. Furthermore, the additional work OCPW has been required to perform as a result of these encampments has consumed the availability of OCPW personnel to perform other flood control, water reclamation, and water quality-related activities, resulting in increased expenditures and delays in the performance of critical flood control projects.

Examples of increased workload and additional costs borne by OCFCD due to the presence of the encampments include:

- Increased trash and debris removal including the associated increased dump fees due to the volume of trash and debris collected on a daily basis.
- Ongoing and repeated repair and/or replacement of fencing, gates, chains, and locks.
- Installation of upgraded security fencing in some problem areas to replace standard chain link fencing. Such upgraded fencing can cost as much as five times more.
- Issuance of a new \$1 million annual contract to bring in supplemental labor resources to address overwhelming workload along the Santa Ana River.
- The requirement to have a 1-hour OCPW response time for retrieval of impounded unattended personal property requires pulling resources off of scheduled critical work and repair activities.

Delayed flood control related maintenance activities include:

- Work crews and contractors that otherwise would be assigned to flood control related maintenance activities have been diverted to handle encampment related work.
- Such deferred work increases risks to the public and could affect the performance of flood control facilities during storms.
- Delayed flood control maintenance activities or damage such as holes dug into embankments can cause flood safety concerns to encampment occupants as well as surrounding communities.
- The U.S. Army Corps of Engineers has conducted Levee Safety Program inspections of the Santa Ana River and other facilities and identified damage as items that could cause unacceptable ratings for levees. This in turn could result in floodplains associated with such unacceptable facilities to be re-established by the Federal Emergency Management Agency which would result in costly flood insurance requirements for property owners within the newly re-established floodplain.

The encampments' growth has also resulted in an increase in concerns about the safety of, and impacts to, the recreation trails located on OCFCD property. Beyond the general concerns related to maintaining the safety of an area open for the public's recreational use, these trails serve as maintenance access roads for OCPW personnel performing flood control activities mandated by the Act. Furthermore, residents of the encampments have engaged in a number of violent or threatening behaviors directed at

OCPW personnel conducting flood control activities, resulting in delays to performance of projects and an increased expenditure on security for OCPW staff performing their duties.

Safety concerns for the general public and work crews include the following:

- OCPW has received verbal complaints from the public of cyclists colliding with items and animals on the access path. Unleashed dogs associated with the encampments have also been observed.
- Rocks and other objects have been thrown at members of OCPW work teams.
- Threats to County workers with knives, pipes, and tools.
- Flood control operations require the movement of materials and equipment along the banks of the Santa Ana River. This presents a particular hazard to encamped persons, as illustrated by an incident where a man camped and asleep next to a dual-use recreational trail stuck his foot out of his tent and had it run over by an OC Parks contractor's truck. Though the contractor had sounded his horn several times, and was driving at a very low speed along the trail, the man who was injured still was unaware of the approaching truck. Intermittent, mobile recreational users, such as bicyclists and hikers, do not face the same risks as sleeping, encamped persons.
- Additionally, the possibility exists that water may top the channel banks, or that encamped persons in the area might find themselves in the way of floodwaters. That is an obvious and ever-present hazard, especially during the rainy season.

The presence of encampments has also required OCPW to collect and store property in areas where OCPW needs to perform work, which is not a core flood control-related responsibility, and detracts required labor and financial resources from such activities. Although these storage and collection activities are related to statutory and legal settlement obligations, the scale and burden of performing those activities is directly proportional to the number of encamped persons living on OCFCD property, and in the opinion of OCPW would be significantly reduced were there fewer people living on OCFCD property.

Issues involved with such storage include:

- **Difficulty in cataloging, storing, and/or verifying ownership for retrieval of impounded, unattended personal property.** OCPW does not conduct operations solely to remove personal property from an area, but flood control operations and maintenance activities frequently require encamped persons to move from a given area, and there is frequently unattended personal property which cannot be objectively determined to be abandoned and therefore must be stored to be potentially claimed later by its owners. The sheer volume of the material that sometimes needs to be catalogued and stored is burdensome, and ascertaining true ownership can be very difficult. OCPW has established seven shipping-container storage sites for personal property around Orange County for 90-day storage.
- **Subjective decision making is needed to differentiate trash from wanted items.** Similarly, due to the unorganized nature of some of the encampments, when personal property is required to be removed from an area, OCPW frequently cannot readily determine if that property was intentionally abandoned or is then merely unattended. As a consequence, and out of an abundance of caution, OCPW stores property that likely could be disposed of if its owners could be found to give their permission.

- **Stored items which are often soiled, contaminated with human waste, or damp bring the potential for disease, rodents, mold, and other health concerns for County workers.** Due to the nature of the encampments, much of the personal property sorted, catalogued, and stored by OCPW has been exposed to the elements or otherwise soiled. This is of particular concern in regard to fabric items.

Again, these lists are not intended to be exhaustive, but rather illustrative of the ongoing challenges faced, and costs borne, by OCPW related to the growth of encampments on OCFCD property.

Although OCPW has implemented several programs to address these growing challenges, including increased trash pickup, regular hazardous material collection, and a storage and collection program for unattended personal property left in project areas, those challenges have not been able to be fully resolved. Furthermore, it is the opinion of OCPW, based on what OCPW personnel have observed in the field, that many of the activities that present the greatest potential threat to flood control infrastructure, including but not limited to the setting of fires, damaging of the levees, the build-up of waste and debris, and vandalism of security gates and fencing, cannot be adequately prevented or addressed while a large population of people, such as those living in the existing encampments, is present and camped on OCFCD property for prolonged periods of time, including during periods of time (e.g., at night) when OCPW personnel are not regularly present.

Therefore, the only conclusion that may reasonably be drawn based on the information gathered by OCPW personnel, and their observations and experiences related to these matters, is that encampments of the type now present on OCFCD property are incompatible with the flood control, water reclamation and water qualities activities OCFCD is statutorily required to perform, and that there are no reasonable actions that can be taken to make such encampments compatible with those statutorily-mandated activities.

Please direct any questions to Kevin Onuma, Deputy Director, OC Operations and Maintenance, at 714-647-3939.