San Bernardino County Public Works – First Line of Defense (FLOD) Permitting

Because of regulatory changes, the District undertook a program to obtaining long-term maintenance permits on a system basis instead of an individual facility basis.

In 2010, the Flood Control District (District) was informed that individual regulatory permits would be necessary before the District could perform any routine maintenance. This change in regulatory compliance requirements resulted in the District applying for approximately 75 individual permits per year for routine flood control maintenance projects every 3 to 5 years. As a result, maintenance at some facilities were unduly delayed/postponed due to biological, environmental, and permitting/regulatory compliance timelines.

To address this unrelenting permitting cycle, the District undertook an innovative solution to identify the most critical flood inundation facilities, and combine these facilities under one permitting effort. After several years of engineering, hydrological studies, biological analysis, regulatory review, and permit negotiations, the District successfully permitted its first multi-facility maintenance agreement, and received regulatory permits from CDFW, RWQCB, and USACE. This project addresses 39 regional facilities referred to as our First Line of Defense Basins located in the foothills of the San Bernardino Valley area.

To achieve permitting goal the District embraced several new and emerging technologies, including Graphical Information Systems (GIS), laptop and hand-held computer mapping, and GIS/Database analysis, integration, and reporting. This included GIS mapping of each facility with individual GIS layers for the type of facility (e.g., basin, channel, DSOD Dam, FEMA insured, etc.), GIS mapping of the type maintenance to be performed, GIS mapping of the vegetative communities impacted by the activity, and innovating hand-held mapping and photographic documentation of each maintenance activity undertaken, for automated regulatory reporting purposes.

Previously, each facility requiring maintenance was evaluated from three permit standards (e.g., requirements of the CDFW, RWQCB, and USACE permit conditions). In carrying out the program the District recognized that an integrated approach to regulatory compliance was needed. Thus, the District embarked on establishing a series of maintenance practices incorporating historical permit conditions, local, state and

federal BMPs, regulatory requirements for protecting State and Federal endangered species, as well as pesticide, and herbicide applications, that could be standardized for all District maintained facilities. This effort resulted in the District developing uniform Standard Operating Procedures (SOPs) for performing and reporting maintenance activities in compliance with local, State, and federal standards regardless of the facility type, location, or type maintenance performed that are integrated into the GIS database.

From a cost saving perspective; previous permitting practices entailed each facility being analyzed individually for engineering, and environmental (predominantly biological and cultural) constraints on an as-needed basis. This approach is inefficient in permitting a large number of activities and/or facilities, which can result in delays in conducting routine maintenance. By grouping similar types of facilities together and completing all necessary engineering, and environmental studies as a group rather than individually, the District achieved a more comprehensive analysis of potential environmental impacts/constraints and achieved a significant overall permitting cost reduction; estimated at approximately $1,000,000 per year over previous year's average permitting costs. This savings will grow each year in the future as the long-term effort entails a 20-year permit cycle, thereby eliminating the need for re-analysis and re-permitting every 3 to 5 years.

Flood Control Districts facing similar regulatory challenges of maintaining and providing regulatory permitting of multiple facilities over a long-term period, can utilize the system-wide or sub-system permitting approach that ultimately will streamline regulatory compliance, and provide long term maintenance planning that will standardize regulatory permitting, reduce regulatory compliance and reporting costs, and reduce labor costs in the long-term.

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