

LOS ANGELES REGIONAL WORKFORCE DEVELOPMENT  
TO MAXIMIZE  
SAFE CLEAN WATER PROGRAM OBJECTIVES

Whitepaper on Research and Findings

December 28, 2023

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## 1. BACKGROUND AND CONTEXT

The Safe Clean Water Program (SCWP or Program) promised L.A. County voters a multi-benefit approach to address a variety of water-related issues by improving water quality, increasing drought preparedness, prioritizing Nature-Based Solutions (NBS), providing Disadvantaged Community (DAC) Benefits, and promoting green jobs, among others. The magnitude of this dedicated annual funding source in the L.A. region holds the promise to significantly advance these goals, including delivering workforce benefits and sustainable jobs with livable wages, in L.A. County.

To maximize the benefits of the SCWP, Accelerate Resilience L.A. saw the need to bring both non-governmental organizations (NGOs) and municipalities to the table to build consensus on how to maximize the benefits of SCWP. An influential team of NGOs and municipal representatives was organized in a Working Group which undertook a multi-year process to prioritize SCWP goals for analysis; model metrics on how to maximize the goals; and develop recommendations to share with the Flood Control District (District). One of these recommendations (Recommendation #20) was to “Create a Robust Workforce Development Program”.

This whitepaper builds upon the Working Group’s workforce development recommendation and takes the next step to provide near-term and long-term recommendations. The work described in this whitepaper includes research that involved: 1) jobs pipeline model projections; 2) a workforce barriers stakeholder survey; 3) stakeholder conversations about workforce needs and current regional gaps; 4) a review of local and national workforce training and development programs to benchmark best practices; and 5) findings and best practices to inform thinking around creation of a workforce program for the SCWP. Included herein are actionable recommendations that could be pursued by the District (and other partnering organizations) to establish a workforce development program to train a local workforce on the needed skill sets and at the right pace for SCWP projects coming online. The full recommendations are provided in Section 5, and are summarized below:

- **Finding 1: Trained workers are needed now**
  - It is recommended that FCD refer project proponents to existing workforce pipelines like the L.A. Conservation Corps for help finding workers while a SCWP workforce program is being established
- **Finding 2: Construction and O&M jobs have greatest need now / O&M jobs are the greatest need over time**
  - It is recommended that a near-term pilot program be established with a focus on training workers for operations and maintenance of stormwater projects
- **Finding 3: Career pathways will ensure a sustainable workforce and maximize SCWP outcomes**
  - It is recommended that the initial pilot training program scope be developed with intended promotional pathways in mind (and allow for training program expansion to broaden cohort expertise in future trainings)
- **Finding 4: Firms/municipalities need guidance on workforce program timing, requirements, and definitions (past and future projects)**
  - It is recommended that the District partner with an established training provider to quickly launch the first training cohort within 6 months and communicate a ramp up strategy to municipalities and project applicants

- **Finding 5: Firms/municipalities need a pipeline of trained and employable candidates**
  - It is recommended that the District publish a schedule for upcoming training cohorts (with a commitment on the number of candidates to be trained by quarter or by year) to help firms and municipalities to plan for successful entry-level candidate job placement
- **Finding 6: Firms/municipalities need candidate recruitment, placement, and hiring support**
  - It is recommended that a training program include full wrap around services to help both candidates and firms/municipalities ensure successful long-term placement of entry level workers; these wrap around services should support recruitment, placement, and hiring to help align candidates with the right employers
- **Finding 7: Firms need support providing competitive wages and benefits to entry level candidates**
  - It is recommended that the financial needs of small, local businesses be surveyed (or further analyzed) to determine the level of financial support needed
- **Finding 8: Municipalities lack knowledge of their needs for skilled and trained workforce**
  - It is recommended that SCWP provide regular educational opportunities for municipalities to learn about building and maintaining stormwater projects
- **Finding 9: Housing and inflation costs may impact local workforce pipeline**
  - It is recommended that all costs associated with training, job placement, and onboarding/retention be included as part of a workforce program so the full suite of expenses are understood and calculated at the onset of the Program (and projected over time)
- **Finding 10: Consistent and sustained long-term investments are needed for candidate training and soft skills / transportation / wages**
  - It is recommended that long-term budget projections be defined now to ensure program transparency and provide assurance to all stakeholders that committed investments will be made for the success of workforce development over years and decades to come
- **Finding 11: Regional expertise exists for workforce training and stormwater curriculum but needs to be scaled / expanded**
  - Beyond an initial pilot cohort, it is recommended that local established training, job placement, and wrap around service providers be identified and assembled into a team to deliver the long-term SCWP tailored training
- **Finding 12: Regional expertise exists for job placement but it is not connected to SCWP**
  - It is recommended that FCD formalize a connection with DEO and establish the roles and responsibilities needed for the SCWP workforce program

## 2. JOBS PIPELINE PROJECTIONS MODEL

### a. Model Purpose

The first step in this research process was to develop a jobs pipeline projections model. The two primary objectives of the Job Pipeline Projections Model (Model) are:

1. To estimate the potential number and type of full-time equivalent (FTE) jobs that could be created by the range of projects and activities funded by the SCW Program Regional, Municipal, and District Programs. These include:
  - . Project-based FTEs: jobs created in the process of planning, designing, building, and operating and maintaining structural stormwater projects.
  - . Other activity-based FTEs: jobs created by the large range of “other activities” funded by the program such as scientific studies, program administration, etc.
2. To gain a preliminary understanding of how potential job creation may change over the long term, particularly with regards to the types of specific occupations that may increase or decrease as the Program matures.

### b. Approach

Modeling approaches are described below for the project- and other activity-based FTE analysis as well as long term FTE projections. While a summary of key assumptions are provided here, a full accounting of the model assumptions is provided in Appendix A.

#### **Project-Based FTE Approach**

The project-based FTE model was developed to estimate FTE jobs for SCW Program funded projects. The model takes a “top-down” approach, beginning with a total project budget, and distributes this across different project stages (Planning, Design, Construction, Operations and Maintenance, and Monitoring). The budgets allocated to each project stage are further divided into labor and non-labor (based on previous project costs and industry standards). Labor budgets included direct and indirect costs (employee benefits) while non-labor budgets included everything else required to deliver projects, such as materials, equipment rental, permitting and other fees. Finally, the labor budgets at each project stage were distributed to a range of occupations needed for project delivery. This resulted in an estimate of FTEs developed per occupation type.

Four distinct, representative (or example) projects were modeled to capture the range of SCWP project applications and costs which have diversity in scale and labor needs. These included the following:

1. A large, publicly accessible nature-based solution (NBS) project such as a wetland/stormwater park. This would be considered a significant public capital project. It was assumed that a municipality would be the project proponent and would provide all management and administrative tasks “in-house”, and that the project would require a CEQA assessment. The hypothetical total budget for this project was assumed to be \$10 million.
2. A moderately sized NBS project such as a bioretention basin (or collection of basins) on a large, private commercial property. It was assumed that the private landowner would act as project proponent and manager. The hypothetical total budget for this project was \$1 million.

3. A subsurface stormwater sewer diversion project managed by a municipality. The hypothetical total budget for this project was \$2 million.
4. A robust Private Property Incentive Program to deliver about 1,000 small-scale stormwater improvement projects on single- and multi-family residential properties. The program would be managed through a partnership with a non-profit and a technical program design/delivery partner. It was assumed that each project would cost about \$10,000 to design and deliver, for a total program cost of \$10 million.

The four projects modeled were assumed to be generally representative of a range of project types funded by the SCW Program. The models do not, however, represent specific real-world projects.<sup>1</sup> For each of the four project models, labor was distributed widely between and within each relevant occupation category to capture the diversity in skill sets required to deliver the projects as well as levels of seniority on project teams. For instance, projects might utilize landscape architects or environmental scientists to a greater or lesser extent (e.g., labor spread between occupation categories). The input values in the project model were intended to be a blend of these real-world project needs. Similarly, while some projects may employ a single “Lead Landscape Architect”, others may distribute this time between an “Associate Landscape Architect” and an “Assistant Landscape Architect” (e.g., within an occupation category). To represent this diversity in labor, the modelers elected to blend Landscape Architecture budget between three levels of seniority and also did the same for other job classifications.

### **Project-Based FTE Assumptions**

This section includes the primary assumptions made to develop the project-based FTE estimates.

### **Distribution of project budget to project stage & labor and non-labor expenses**

The following assumptions were made to distribute the total project budgets into five project stages.

- Geosyntec, 2018, reported that O&M totals are between 1% and 6% of construction costs for green infrastructure capital improvement projects, with an average of 4%. The model utilized the average value of 4% for O&M and assigned an additional 2% for ongoing monitoring costs. Costs for monitoring equipment were considered an initial capital expense during construction.
- Geosyntec, 2018, also reported that pre-construction costs are on average about 30% of construction. The modelers assumed that planning and design stage costs were 10% and 20% of construction costs respectively.
- With the exception of the Private Property Incentive Program, these distributions were kept constant for the projects modeled. The Private Property Incentive Program was assumed to have efficiencies in planning and design stages as much of this work is replicable between individual projects. However, O&M and monitoring for the Private Property Incentive Program was assumed to be less efficient as there are many more sites that need to be maintained and monitored. Planning and design stages were therefore assumed to be 3% and 4% of construction costs, respectively, while O&M and monitoring were assumed to be 12% and 4%, respectively.

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<sup>1</sup> The model has flexibility built in that allows for values and assumptions to be adjusted over time. As more projects are built, and as cost estimates evolve, these example projects could be updated in the model to adaptively manage project delivery and workforce projections.

- Land acquisition costs were not included in the model. Land acquisition could significantly reduce FTEs on individual projects when needed.

The following additional assumptions were made to distribute Project Stage budgets into labor and non-labor categories.

- For planning and design stages, 98% of the stage budget was assigned to labor. Only a small portion of the budget during these stages would normally be used for other expenses such as printing, transportation, and meals.
- Sullivan, 2019, reported that, according to the Construction Labor Market Analyzer, construction labor costs are typically between 20% and 40% of construction costs and that the number is closer to 40% when accounting for indirect labor costs (i.e., employee benefits). As it is accounting for indirect costs, modelers assumed labor costs are 40% of the construction stage budget.
- O&M labor costs were assumed to be 60% of the O&M stage budget. This allows some significant budget for other costs such as materials (e.g., plants, soil, mulch, parts replacement) and equipment rental and operation (e.g. back-hoe, fuel) and disposal of materials (e.g. sediment, green waste).
- Monitoring labor costs were assumed to be 80% of the Monitoring stage budget. This allows some budget for other costs such as monitoring materials and equipment. We further assumed that labor costs assigned to lab workers also cover lab fees.
- The above distributions were held constant across all project types. The single exception is that construction labor for the Private Property Incentive Program was increased from 40% to 50%, since delivering projects at numerous sites is likely to require additional administration and construction labor.

The assumptions described above, which explain how project budgets were distributed to project stages and labor are summarized in Table 1 below. This table excludes the Private Property Incentive Program, which had customized assumptions as previously described.

**Table 1: Budget and labor by project stage for Representative Projects 1-3**

	Planning	Design	Construction	O&M	Monitoring
<b>Stage Budget as % of Construction Budget</b>	10%	20%	100%	4%	2%
<b>Stage Budget as % of Total Project Budget (%)</b>	7.35%	14.71%	73.53%	2.94%	1.47%
<b>% of Stage Budget Assigned to Labor</b>	98%	98%	40%	60%	80%

**Indirect Labor Costs**

Indirect labor costs are costs incurred to maintain employee benefits, but which are not distributed directly to employees as salary. These can vary widely. For modeling purposes, two general classifications were used:

1. employees working directly “in-house” for a project proponent such as a municipality (or FCD), or a private landowner; and
2. employees working as consultants to the project proponent.

The indirect labor rate for “in-house” employees was assumed to be 130% of direct labor costs. This is based on circumstantial knowledge of study team-members who have experience working with FCD. Note that further confirmation of this value from the District may be helpful; while this value may vary between project proponents, it is assumed that correlating this to County standards is appropriate.

The indirect labor rate for “consultants” was assumed to be 160%. Based on industry experience, this number is also variable and can range from between 100% and about 180%. In an article titled “Ten Key Metrics Your A&E Firm Should Track”, indirect labor costs were reported to be between 150% and 175% (Johns, 2022).

Assignment of individual occupations to either “in-house” or “consultant” categories was based solely on knowledge of project delivery processes. For example, municipalities generally hire engineering and landscape architecture consultants but have an in-house team assigned for overall project management and administration.

#### **Labor Distribution by Occupation**

Labor budgets were distributed to individuals working in a broad range of occupations. The model used job classifications and salaries listed in the “Los Angeles County Class and Salary Listings” (L.A. County, 2023) to the extent practical. Some additions were made using online sources where a specific L.A. County classification does not exist. For example, L.A. County does not have a classification for CAD Drafter; salaries for a CAD Drafter were found on salaries.com.

In all, 20 occupation categories were included in the labor models (for projects and other activities), each with a subset of occupations, including various positions at junior and senior levels. However, not all occupations were used for each project. For the smaller NBS projects and the Private Property Incentive Program, it was assumed that a smaller team would deliver projects and that not all levels of seniority would be used for certain occupation categories. Occupation categories included in the model are listed in Table 2.

**Table 2. Occupation Categories**

1. Organizational Leadership	11. Geotechnical Engineering
2. Project Management	12. Electrical Engineering
3. Regional/Urban Planning	13. Permitting/Inspection
4. Civil Engineering	14. Construction Management
5. Landscape Architecture	15. Construction Labor
6. Environmental Sciences (includes CEQA and Monitoring Support)	16. Construction Trades
7. Surveying	17. Drivers and Operators
8. CEQA / NEPA development	18. Operation and Maintenance
9. Community Engagement	19. Monitoring and Lab Work
10. Data Management and GIS	20. Academics / Trainers

References related to detailed budgeting of stormwater infrastructure projects by occupation (particularly the extensive set of occupations identified here) are not available. Therefore, the assignment of labor budget to each occupation was based on engineering experience. As developed, the model reasonably captures the range and relative magnitude of labor budget distribution. However, it should be considered as one individual interpretation based on the assumption and references documented herein. The specific occupations within each occupation category, and additional assumptions related to how labor budgets are distributed to each occupation for the representative projects, are provided in the accompanying tables in Appendix A.

**Other Activity-based FTE Approach**

Numerous activities funded by the SCWP include labor that is not directly related to project delivery. These were also modeled with broad consideration for the diversity of occupations that may be needed to deliver these activities. The general approach taken here is similar to the project-based FTE model, i.e., a top-down model that assigns the overall program budget to a range of occupations. As with the four project types discussed previously, several models were created for the other SCWP-funded activities, based on SCW defined sub-programs as well as a catch-all category for other activities. These models include:

- Public Education, Workforce Development and Schools Education Program Model
- Technical Resources Program Model
- Scientific Studies Model
- General Other-Activities Model for unassigned budgets: This accounts for non-project budgets within the District and Municipal programs, other than those for the three programs above.

### Other Activity-Based FTE Assumptions

To estimate FTEs for non-project, other activities funded by the SCW Program, it was necessary to make some broad assumptions about the portions of the District, Municipal and Regional Program funds that support the other activities. The assumed and mandated budgets for the other activity models are provided in Table 3. Significant assumptions include:

- 20% of funds for the **District Program** were allocated to projects (design through O&M). Data was not available regarding actual District expenditures on projects, so this is a rough guess and can be modified as needed. 20% of the District program funding was allocated as required to the Public Education, Workforce Development and Schools Education Programs. The remaining 60% was allocated to a general classification of other activities (including administrative costs).
- 50% of funds for the **Municipal Program** were allocated to projects (design through O&M). We've seen a large diversity of expenditures from Municipalities, so this assumption may be helpful to validate after future rounds of submissions. The remaining 50% was allocated to a general classification of other activities.
- **Regional Program** allocations are mandated by the SCWP and include 85% towards projects, 10% towards the Technical Resource Program, and 5% to Scientific Studies.
- Regardless of project phase, the spread of labor for the funds associated with projects for all of the 3 primary programs was assumed to be roughly equivalent to the distribution in the project-based FTE model previously described.
- Each of the various non-project components, whether general classification, other activities or specific sub-programs have their own jobs model with unique labor distributions to individual occupations. For example, the education program FTE model included time for teachers at both public school and university levels. Details of these models can be found in Appendix A.

Table 3. Assumed budgets for SCW Programs

	% of SCWP Budget	Budget	Sub-budgets	% of Program Budget
District Program	10%	\$ 28,065,885		
<i>Projects</i>			\$ 5,613,177	20%**
<i>Other Activities</i>			\$ 16,839,531	60%**
<i>Public Ed, Workforce Dev., Schools Ed.*</i>			\$ 5,613,177	20%
Municipal Program	40%	\$ 112,263,540		
<i>Projects</i>			\$ 56,131,770	50%**
<i>Other Activities</i>			\$ 56,131,770	50%**
Regional Program	50%	\$ 140,329,425		
<i>Projects</i>			\$ 119,280,012	85%
<i>Technical Resource Program</i>			\$ 14,032,943	10%
<i>Scientific Studies</i>			\$ 7,016,471	5%
2022 SCWP Budget		\$ 280,658,851	\$ 280,658,851	

\* **Not less than** 20% of District Program funds allocated to these programs.

\*\* Assumptions

Additional assumptions related to how labor budgets were distributed to each occupation within the four “other activity” models, are provided in the accompanying tables in Appendix A.

### Long-Term FTE Projections Approach

The long-term projections for FTE jobs were based on the previous models developed, including the project-based, other activity and sub-program models that cover the full range of SCWP funded activities. The outcomes of these models along with other assumptions outlined below are used to estimate SCW Program job creation potential over 50 years, beginning in 2023.

### Long-Term FTE Projection Assumptions

The model assumed that all planning, design and construction budgets occur in the year of the SCWP allocation, i.e. these activities are not parsed out into subsequent years. O&M was assumed to begin in the year following allocation and monitoring activities were assumed to occur for 3-years beginning in the year following allocation. Once a project is built, its annual O&M budget continued indefinitely. This ongoing budget allocation, which grows over time as more projects are built, decreases the amount of funds available for funding new projects. Therefore, new project allocations decrease over time.

In addition, wages are assumed to increase by 3.08% each year based on the Average Wage Index (AWI) for the period 2001 through 2021 (U.S. Social Security Administration, 2023). Over time,

these wage increases erode the FTE positions that the SCWP can support in all phases and job categories.

**c. Model Results**

The results of the project-based FTE model, other activity FTE model and Long-Term FTE Projections are provided below.

**Project-based FTE Results**

The project model was used to make FTE projections for all elements of the SCWP that are delivering projects (District, Regional and Municipal Programs). The results of the project-based FTE model are described in this section. The model excludes the Private Property Incentive Program, which is modeled and reported separately, as it is not currently part of the SCW Program.

**The project-based FTE model resulted in the creation of an estimated 2.93 FTE/\$1 million project budget.** Details of this estimate by occupation are provided in Table 4 which shows the potential FTEs created per \$1 million budget for each occupation category and parsed further by each occupation. As previously mentioned in the assumptions, these are based on 2023 salaries.

**Table 4: Potential project-based FTE Estimates: Average of 3 project types (excluding the Private Property Incentive Program)**

Occupation Category (includes related support roles)	Occupation Name	Seniority Level	FTE/\$1M by Occupation	FTE/\$1M by Occupation Category
<b>Organizational Leadership</b>	Department Director	Senior	0.0008	0.01
	Deputy Director	Senior	0.0026	
	Assistant Deputy Director	Senior	0.0012	
	Capital Project Program Manager	Senior	0.0038	
<b>Program/Project Management &amp; Admin</b>	Principal in Charge / Senior Capital Project Manager	Senior	0.0119	0.20
	Program Manager / Capital (Construction) Project Manager	Mid	0.1055	
	Deputy Program Manager / Capital Project Management Assistant	Junior	0.0371	
	Administrative Support / Case Worker	Senior	0.0171	
	Administrative Support / Case Worker	Junior	0.0097	
	Account Clerk	Mid	0.0000	
	Account Clerk	Junior	0.0000	
	Construction Cost Estimator	Mid	0.0199	

<b>Regional/Urban Planning</b>	Principal Regional Planner	Senior	0.0044	0.01
	Lead Regional Planner	Senior	0.0070	
	Assistant Regional Planner	Junior	0.0034	
<b>Civil Engineering / Other Trainers</b>	Principal Civil Engineer	Senior	0.0221	0.46
	Lead Civil Engineer	Mid / Senior	0.1347	
	Assistant Civil Engineer	Junior	0.2578	
	Lead CAD Drafter	Senior	0.0180	
	CAD Drafter	Mid	0.0263	
<b>Landscape Architecture</b>	Landscape Architect Associate	Senior	0.0037	0.07
	Lead Landscape Architect	Senior	0.0203	
	Landscape Architect Assistant	Mid	0.0372	
	Graphics and Visualization	Mid	0.0071	
<b>Environmental Sciences (also supports CEQA and Monitoring)</b>	Lead Biologist	Senior	0.0075	0.09
	Biologist	Mid	0.0187	
	Climate Advisor	Senior	0.0010	
	Lead Environmental Scientist	Senior	0.0101	
	Environmental Scientist	Junior	0.0253	
	Hazardous Materials Lead	Senior	0.0077	
	Hazardous Materials Specialist	Mid	0.0074	
	Hazardous Materials Junior	Junior	0.0088	
	Watershed Management	Senior	0.0012	
<b>Surveying</b>	Survey Party Chief	Senior	0.0152	0.07
	Survey Assistant	Mid	0.0103	
	Survey Technician	Junior	0.0054	
	Geologist	Mid	0.0213	
	Drill Supervisor	Senior	0.0077	
	Driller	Mid	0.0069	
<b>CEQA / NEPA</b>	Lead Environmental Consultant	Senior	0.0179	0.05
	Junior Environmental Consultant	Junior	0.0285	
<b>Community Engagement</b>	Community Engagement Manager	Mid	0.0510	0.08
	Community Engagement Assistant	Junior	0.0257	
<b>Data Management and GIS</b>	Data Scientist	Senior	0.0042	0.01
	Data Scientist Assistant	Junior	0.0030	
	GIS Manager	Senior	0.0006	
	GIS Analyst	Mid	0.0019	

	GIS Technician I	Junior	0.0011	
<b>Geotechnical Engineering</b>	Engineering Geologist	Senior	0.0049	0.03
	Engineering Geologist	Mid	0.0161	
	Engineering Geologist Assist	Junior	0.0081	
<b>Electrical Engineer</b>	Electrical Engineer	Mid	0.0082	0.01
<b>Permitting / Inspection</b>	Code Compliance Supervisor	Senior	0.0025	0.05
	Fire Permit Technician		0.0052	
	Senior Storm Water Inspector	Mid	0.0026	
	Storm Water Inspector	Mid	0.0118	
	Code Compliance Reviewer	Mid	0.0271	
<b>Construction Management*</b>	Field Representative	Mid	0.0166	0.02
<b>Construction Labor</b>	Construction Superintendent	Senior	0.0669	1.21
	Foreman	Mid	0.0403	
	Construction laborer	Mid	1.0867	
	Field Engineer	Senior	0.0117	
<b>Construction Trades/ Other Trainers</b>	Lead Carpenter	Mid	0.0222	0.21
	Carpenters Apprentice	Junior	0.0120	
	Cement and Concrete Finisher	Mid	0.0594	
	Cement and Concrete Worker	Junior	0.0588	
	Lead Electrician	Mid	0.0074	
	Electrician Apprentice	Junior	0.0052	
	Lead Welder	Senior	0.0156	
	Welder	Mid	0.0123	
	Traffic Painter and Sign Poster Sup.	Senior	0.0081	
	Traffic Painter and Sign Poster	Mid	0.0100	
<b>Drivers and Operators</b>	Heavy Truck Driver		0.0261	0.25
	Light Tractor Operator	Mid	0.0852	
	Medium Truck Driver		0.0636	
	Heavy Power Equipment Operator	Mid	0.0100	
	Power Equipment Operator	Mid	0.0323	
	Power Equipment Operator Helper	Junior	0.0377	
<b>O&amp;M / Other Trainers</b>	Grounds Maintenance Supervisor	Senior	0.0168	0.10
	General Maintenance Worker	Junior	0.0171	
	Grounds Maintenance Worker II	Mid	0.0073	
	Grounds Maintenance Worker I	Mid	0.0294	

	Grounds Maintenance Helper	Junior	0.0036	
	Power Sweeper Operator	Mid	0.0092	
	Tree Farm Manager	Senior	0.0003	
	Head Plant Nursery Worker	Mid	0.0008	
	Plant Nursery Worker	Mid	0.0005	
	Tree Trimmer and Pest Coordinator	Mid	0.0036	
	Sewer Maintenance Supervisor	Senior	0.0034	
	Power Equipment Technician	Mid	0.0026	
	Power Equipment Technician Helper II	Junior	0.0017	
<b>Monitoring and Lab Work</b>	Laboratory Quality Control Coordinator	Senior	0.0035	0.02
	Laboratory Assistant	Junior	0.0133	
<b>Academics/Teaching / Training</b>	Not applicable to project model but included in the "other activity" models		0.0000	0.00
<b>Total</b>			<b>2.93</b>	<b>2.93</b>

\* A Construction Project Manager position was assumed to be in-house and residing within the Program/Project Management & Admin occupation category

Some additional observations/outcomes are provided below:

- The range of jobs created across the three project types modeled was very close, between 2.89 and 2.95 FTE /\$1 million project budget.
- **The Private Property Incentive Program model (not included in Table 4 results above) results indicate slightly higher job creation than the others at 3.13 FTE/\$1 million budget**, mainly due to two reasons. First, as these projects would utilize standard designs applied across numerous projects, a smaller portion of funds is assumed to be applied to planning and design while a higher portion is applied to construction (increased from about 73% to 81%). However, due to inefficiencies in delivering projects at multiple small sites, as compared to single, large ones, it was assumed that the percent of construction costs applied to labor would increase by 10%. The resulting outcome of these two changes to the model assumptions is slightly higher overall job creation for the Private Property Incentive Program as compared to the other models.

#### **Other Activity-Based FTE Results**

The results of the four other activity FTE models are provided Table 5 below in FTE/\$1 million budget.

**Table 5: Estimated FTE/\$1 Million Budget for Various Program Elements**

<b>Program</b> <i>Project, Other Activity or Sub-Program</i>	<b>% of Program Budget</b>	<b>FTE/\$1M</b>
<b>District Program</b>		
<i>Projects: Unassigned budget</i>	20%	2.93
<i>Other Activities: Unassigned budget</i>	60%	4.06
<i>Public Ed, Workforce Dev., Schools Ed.</i>	20%	5.38
<b>Municipal Program</b>		
<i>Projects: Unassigned budget</i>	50%	2.93
<i>Other Activities</i>	50%	4.06
<b>Regional Program</b>		
<i>Projects: Assigned</i>	85%	2.93
<i>Technical Resource Program</i>	10%	3.91
<i>Scientific Studies</i>	5%	4.35

Overall, other activities and program types that did not include construction phases resulted in higher FTE creation as compared with the Project-based FTE model. This is largely due to both the elimination of costs applied to construction materials (which was assumed to account for 60% of construction budgets) as well as lower documented salaries in some sectors (e.g., education).

### **Long-Term FTE Projection Results**

Results of the long-term FTE projection model showing only the major occupation categories are provided in Table 6 below for the 1st (2023) and 30th (2053) year of the model projections.

Table 6: Long Term FTE Projections by FTE Category

	District Program			Municipal Program		Regional Program			TOTAL Year 1	TOTAL Year 30	% Change
	Projects	Other Activities	Public Education	Projects	Other Activities	Projects	Tech Resource Program	Scientific Studies			
Occupation Category	FTE by Occupation Category (Year 1)										
Organizational Leadership	0.05	2.10	0.03	0.49	4.51	1.04	0.51	0.00	8.7	3.1	-65%
Program Management/Admin	1.17	8.75	5.60	11.74	35.37	24.95	5.11	0.00	92.7	39.2	-58%
Regional/Urban Planning	0.08	1.25	0.00	0.84	4.23	1.79	1.22	0.00	9.4	3.2	-66%
Civil Engineering / Other Trainers	2.47	6.70	0.50	24.70	18.05	52.49	23.31	1.96	130.2	25.5	-80%
Landscape Architecture	0.37	2.00	0.50	3.68	11.60	7.82	7.22	1.06	34.2	10.0	-71%
Environmental Sciences	0.47	12.50	0.75	4.70	25.00	10.00	5.06	10.17	68.6	30.5	-56%
Surveying	0.40	0.00	0.00	3.98	4.23	8.45	2.29	0.00	19.3	3.4	-82%
CEQA / NEPA	0.26	0.00	0.00	2.63	3.44	5.59	2.83	0.00	14.8	3.3	-78%
Community Engagement	0.45	2.50	2.00	4.45	3.60	9.47	5.05	0.00	27.5	6.1	-78%
Data Management and GIS	0.06	3.50	0.00	0.60	8.29	1.28	0.83	1.88	16.4	6.2	-62%
Geotechnical Engineering	0.16	0.00	0.00	1.63	1.84	3.47	0.67	0.00	7.8	1.4	-83%
Electrical Engineer	0.05	0.00	0.00	0.46	0.51	0.98	0.39	0.00	2.4	0.5	-80%
Permitting / Inspection	0.25	3.00	0.00	2.48	15.41	5.27	0.43	0.00	26.8	23.7	-12%
Construction Management	0.09	1.00	0.00	0.93	0.00	1.98	0.00	0.00	4.0	1.5	-63%
Construction Labor	6.85	0.00	0.00	68.54	0.00	145.65	0.00	0.00	221.0	12.2	-94%
Construction Trades	1.18	0.00	0.50	11.85	0.00	25.17	0.00	0.00	38.7	2.5	-94%
Drivers and Operators	1.37	4.20	0.00	13.75	9.79	29.21	0.00	0.00	58.3	59.3	2%
O&M / Other Trainers	0.60	19.00	3.28	5.98	60.92	12.72	0.00	0.00	102.5	226.0	120%
Monitoring and Lab Work	0.07	0.50	0.00	0.73	4.49	1.56	0.00	1.45	8.8	3.3	-62%
Academics/ Training	0.01	1.41	17.02	0.07	16.85	0.16	0.00	14.00	49.5	20.4	-59%
Sub-Totals	16	68	30	164	228	349	55	31	942	481	-49%
Totals	115			392		434			942	481	-49%

The results in Table 6 represent estimated potential FTE creation in the first year of the model (2023) and is based on 2023 labor rates. **However, due to increases in labor rates and increasing commitment to continued O&M on built projects, these distributions shrink and change over time.** For comparison, the estimated potential FTEs in model year 30 (2053) are provided in the second to last column. **The last column in the table shows an estimated 49% decrease in the overall ability to support jobs between model year 1, (942 FTEs) and model year 30, (481 FTEs). Note that all categories experience a decrease with the exception of O&M related occupations, which increase by 120% over this same period.**

The model was extended out to 50 years, the results of which are shown below in Figures 1 through 4, first individually for each of the District, Municipal and Regional Programs, and then for the entire SCWP. General observations about these charts are described below.

- **Planning, designing and constructing projects decreases over time as the commitment to O&M on built projects increases.** As mentioned previously, the model assumes that planning, design and construction budgets are used in the year of SCW Program budget allocation and that O&M begins the following year. The real-world impact of this assumption is that construction activities would likely be pushed out further in the timeline than currently modeled, due to delayed construction. As such, O&M needs may grow more slowly than projected. Nevertheless, the take-home finding, that O&M jobs will replace construction jobs over time, remains valid. **Over the long term, the SCW Program may consider the utility of cross training construction workers to undertake O&M and potentially start small businesses that can meet the projected growth in demand for O&M services.**
- **Any program element with a static budget (e.g. Technical Resource Program, Public Education Program or Scientific Studies) will see significant FTE attrition over time due to the increasing cost of labor, i.e. the same budget will support fewer FTEs as salaries rise.** The District may wish to consider whether such attrition is acceptable given the nature of the programs. For instance, since the Technical Resource Program is designed to assist project proponents in the planning and design stages, this program may not be as necessary as fewer new projects are funded. The same could be true for Public Education, which may achieve a saturation or status quo over time. On the other hand, increased funding for scientific studies, particularly those that track long-term performance (beyond the required 3-year period for projects) may be desirable. **It is recommended that the District develop a means for tracking how well individual program resources are meeting each program's need with a redistribution of funds, as needed, based on those findings.** Indeed, redistribution from underutilized or overfunded programs to new projects may be an option.
- Around year 34, construction of new projects ceases and is replaced entirely by O&M. At this point, and it is acknowledged that the model may be slightly off in terms of precise timing, the SCW Program will begin facing challenges related to ongoing maintenance as the number of FTE O&M positions that can be supported by the constant budget will decline. There are several potential fixes to this future conundrum. **One worth considering is creation of an O&M endowment, essentially a set aside from perhaps-unused funds across the Program, which can support additional O&M job creation. Another is to gradually funnel funds from Programs that may become less useful over time towards O&M activities. One likely candidate, as previously mentioned, is the Technical Resources Program, which will likely become less useful when new project development activities decline.**

Figure 1: District Program 50 year labor projections

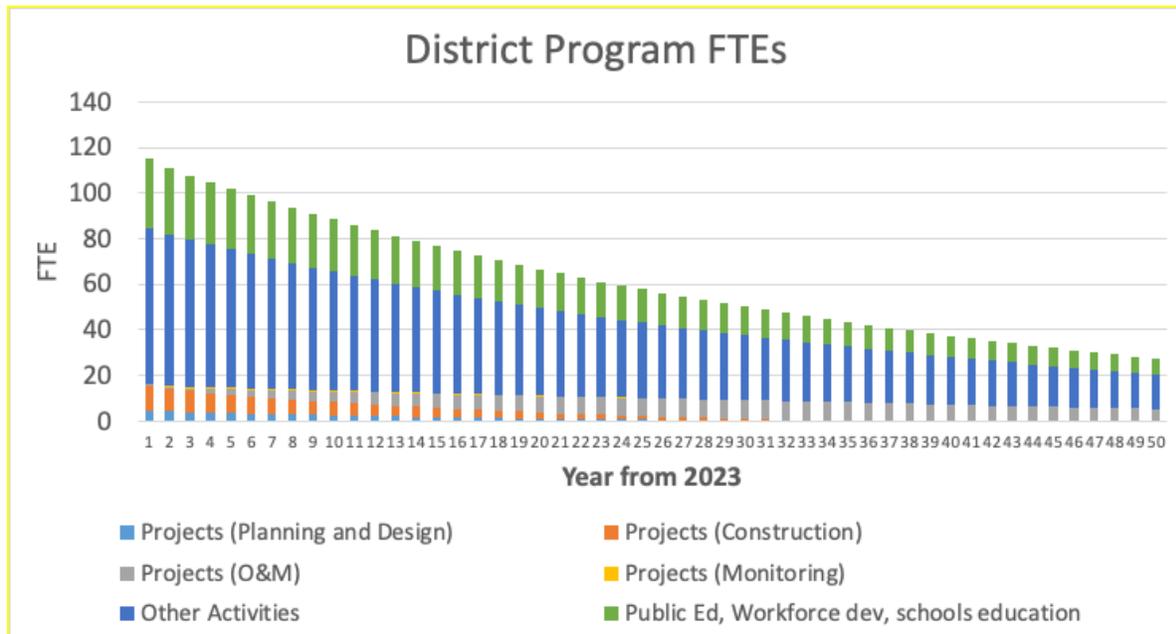


Figure 2: Municipal Program 50 year labor projections

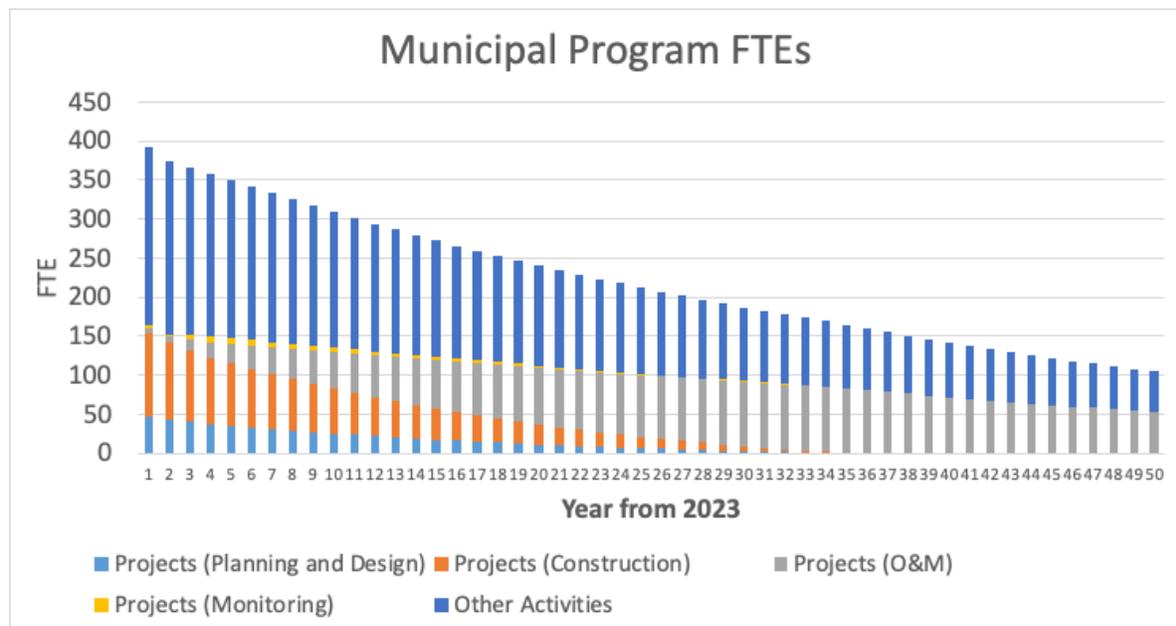


Figure 3: Regional Program 50 year labor projections

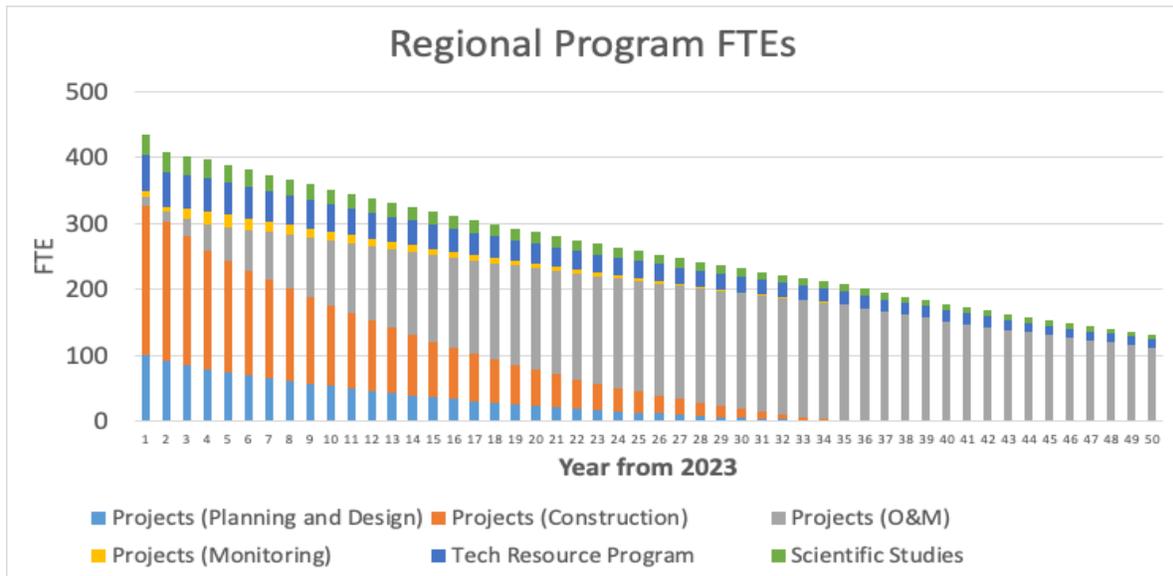
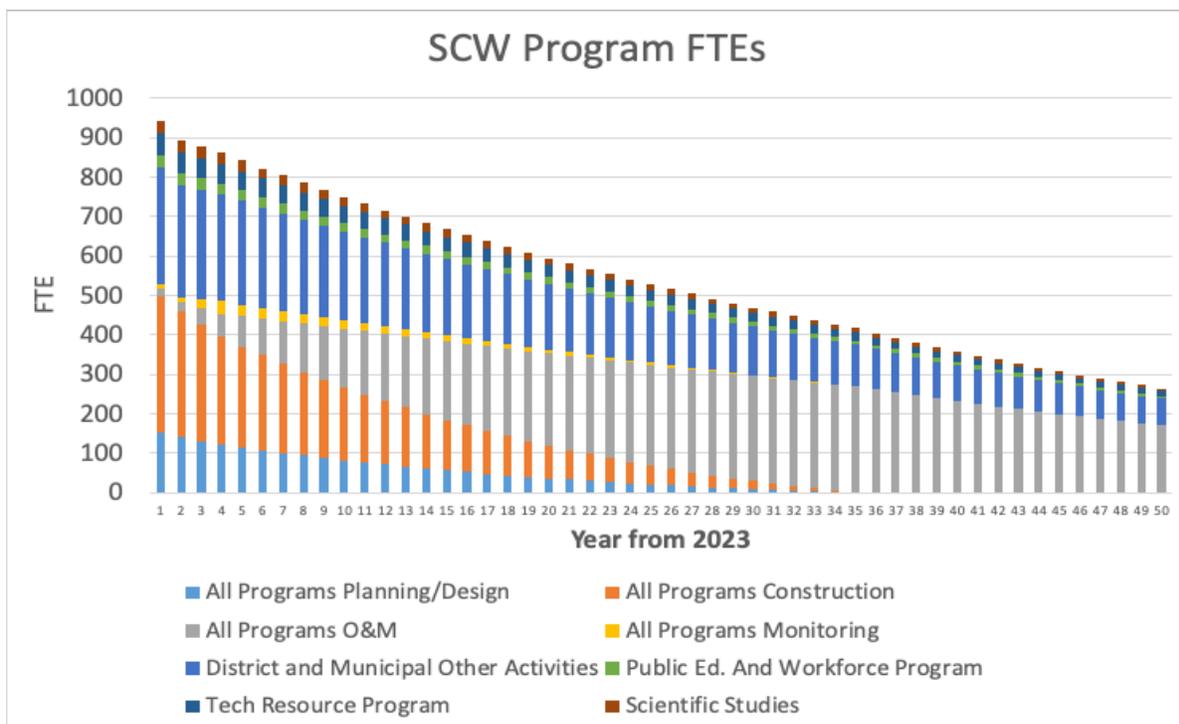


Figure 4: Overall SCW Program 50 year labor projections



### 3. WORKFORCE BARRIERS STAKEHOLDER SURVEY

#### a. Survey Purpose

The purpose of the Workforce Barriers Stakeholder Survey was to ground truth the current barriers to meeting minimum hiring goals and requirements to inform regional needs and workforce development next steps with SCWP project proponents and stakeholders. Through the survey, we were interested in learning about workforce capacity and capability concerns of the participating organizations, identifying the largest barriers to implementation for each entity, and soliciting their recommendations for how to close the gaps to support successful implementation of a sustainable local workforce development program.

Given the scope and scale of the SCWP, many program stakeholders will either be required to meet local hiring metrics (i.e. project applicants, developers/construction firms, landowners/municipalities, entities responsible for maintenance, etc.) or will help contribute to meeting goals (i.e. non-profits, watershed coordinators, etc.). As such, we targeted a range of project proponents and stakeholders to solicit responses that covered the following roles in program implementation: municipalities, consulting firms, NGOs/non-profits, watershed coordinators, and construction and maintenance firms. Most respondents provided feedback through an online survey platform. Where needed, some respondents provided feedback via individual meetings; however, all responses are being reported anonymously so that survey participants were comfortable providing honest feedback through either process.

Before starting the survey, the following context setting information was provided to ensure that the respondents understood the scope and scale of workforce development as outlined in the Los Angeles County Code, including:

- Chapter 18 of the Los Angeles County Code describes the Safe, Clean Water Program Implementation Ordinance. Related to workforce development, Section 18.05, "District Program Implementation" states: "The Chief Engineer shall implement and administer the following... **Local workforce job training, which will provide certification classes and vocational training at the community level for the construction, inspection, operation and maintenance of Stormwater or Urban Runoff management and Multi Benefit Projects, including instruction regarding applicable design concepts; and educational Programs....** Not less than twenty percent (20%) of District Program funds shall be allocated for these Programs [Note: includes public education, local workforce training, schools education] over a revolving five (5) year period....These Programs will be implemented throughout the District with special attention to the needs of DACs. The Chief Engineer shall partner with Stakeholders to collaboratively develop and implement these Programs." [Note: bold font added for emphasis]
- In 18.07 "Regional Program Implementation" states "The District shall request proposals for Projects to be included in the Infrastructure Program...Small and medium scale, community level **Projects may be combined into a single Project proposal to promote efficiency, achieve economies of scale and advance local-hire and job-training goals.** If an Infrastructure Program Project Applicant intends for operation and maintenance costs to be considered for inclusion in a SIP, the **Applicants proposal must include an operation and maintenance plan that identifies the required activities over the useful life of the Project and any expertise or technical training necessary to perform the activities, identify the party that will be responsible for operation and maintenance of the Project, and include a letter of commitment from that party to operate and maintain the Project throughout the Projects useful life.**" [Note: bold font added for emphasis]

Survey questions were grouped into a few main categories including personal/firm information; feedback on workforce limitations/barriers; support and assistance that may be needed by the organizations; reporting; and benchmarking successful local programs. A list of the survey questions is provided below:

1. Please provide your contact information.
2. For the organization listed in question 1, what type of organization do you represent?
3. What is your primary organization's current (or desired) role(s) in delivering Safe Clean Water Program projects?
4. Are you affiliated with any additional organizations?
5. Are you responding for your primary organization only or on behalf of other affiliated organization(s)?
6. Characterize your primary organization's level of participation in the Safe Clean Water Program to date.
7. Prior to this survey were you aware of the L.A. County ordinance requirements about workforce development?
8. After reading the L.A. County ordinance, what requirements about workforce development and training (if anything) were you unaware of, concerned you, or you have questions about?
9. Select and rank the challenges you have experienced with the current workforce and candidates to increase the utilization for Safe Clean Water Projects?
10. Beyond candidate capabilities/capacity, what limitations or barriers exist for your organization to increase the utilization of a local workforce for Safe Clean Water Projects?
11. As a workforce development program is created, what are the most important things that can be done to help support your organizations' hiring and employment of sustainable/long-term local workers?
12. Do you recommend firm or project incentives around hiring and maintaining a local workforce (e.g. preference points or selection incentives which improve award outcomes)?
13. Regarding tracking and reporting for workforce development, provide suggestions on how this process can be best streamlined for your organization. What is the best frequency of reporting on workforce statistics?
14. What is the best timing of reporting?
15. What is the best process of reporting?
16. Describe any current reporting (administrative, fiscal/tax, payroll, etc.) that occurs for local, state, or federal government which could be used to minimize replicating workforce reporting for your organization.
17. Provide any examples of local successful workforce programs or partners that should be contacted or reviewed for lessons learned. Please include in your response why you feel these programs are successful.
18. Please provide any additional feedback or comments that were not already covered in the previous questions, which may be helpful related to training and workforce development.

## b. Summary of Survey Results

A total of 28 organizations and firms responded to the survey, representing the following areas of expertise: municipalities, consulting firms, and NGOs/non-profits. Three of these respondents also serve as Watershed Coordinators for the SCWP in addition to other roles they have. Survey representation from firms where their main role is construction and operations and maintenance (i.e. field work) was limited, so experiences from these firms may need to be supplemented through other methods; however, consulting firms were well represented and indicated that they perform design work and support the construction of SCWP projects. Survey respondents had even representation across the various stages of project implementation including planning, design, construction, maintenance, stakeholder engagement/outreach, and advocacy. A few survey respondents also indicated that they provide workforce training. The level or maturity of firm/organization participation in the SCWP (to date) was split (ranging from significant participation/submitted >10 projects to no participation to date); approximately 57% of the respondents had no or limited participation to date in the Program but indicated a knowledge and interest in the Program, and 43% had moderate, high, or significant participation in the Program. For the respondents that have limited participation in the Program to date, we found their feedback unique and valuable because they shed light on barriers to their current participation to date.

Survey respondents' awareness of the SCWP requirements about workforce development was strong, with over 90% of respondents somewhat or very aware of the requirements for District Program funds to be allocated to various program areas including public education, local workforce training, and school education (including a focus on Disadvantaged Communities).

Respondents provided a long list of concerns related to workforce development at this time, and they are summarized below in the following areas, generally sorted from highest to lowest concern:

- **Timing/Progress:** Lack of progress (curriculum development, training, etc.) and communication/transparency regarding next steps in program development/timing
- **Program Direction:** Strategic direction of the program is unclear, and timing of the program startup is unknown in particular:
  - Intended targeted workforce (including whether candidates will be paid for training) is unknown
  - Intended training entity is unknown
  - The connection of trained workers to employment opportunities/pipeline of projects is not established
  - The impact and connection to other activities already underway is unknown
- **Funding Allocations:** Transparency and understanding of funding allocations (percentages across program areas)
- **Lack of Regional Knowledge:** Municipalities' limited experience and knowledge of how to build and administer a local, green workforce

- **State Rules/Limitations:** Assembly Bill 5 (“AB5”, which extended employment classification status to gig workers and other types of workers such as interns) requirements are hard to meet, which impacts the pipeline for internships and opportunities for entry into workforce

When asked about the most commonly experienced challenges that will be encountered with increasing utilization of a local workforce related to SCWP, **survey respondents overwhelmingly indicated that there was a lack of local workers (quantity) and a lack of skilled workers (various levels and types) to fill the needed positions for SCWP.** The highest-ranking response for lack of skilled workers was related to candidates not having minimum needed education such as a high school degree (or GED); beyond the clearly noted gap of available HS diploma/GED candidates, the need for skilled workers was a consistent response but the skill type varied based on the respondent. For example, consulting firms had slightly higher responses indicating the need for bachelor’s degrees. Candidates having specialty skills was indicated as a strong need, including both for the design/construction of pipes/pumps (or traditional civil engineering) and stormwater infrastructure. Life skills and other soft skills were ranked as less of a concern in the survey in terms of impacts to the SCWP implementation, and these include: childcare and transportation issues; work schedule concerns; language barriers; background check issues; and overall soft skills. Specialty certificates (or areas of specialty) were noted as a need and the following examples were referenced by respondents: Integrated Water Resource Management Certificate such as Watershed Wise Landscape Professionals certification; and native landscape maintenance.

Beyond candidate capability and capacity consideration, the survey respondents indicated that the top barriers to increasing utilization of a local workforce for SCWP projects were the following (ranked highest to lowest):

1. Difficulty providing benefits (such as vacation/leave; insurance/health care; etc.)
2. Uncertainty about SCWP projects (requirements or pipeline)
3. Needing recruitment support and needing training support (Tied for No. 3 and 4)
4. -
5. Uncertainty about economy
6. Inadequate stormwater work for year-round or full-time hiring
7. Difficulty providing competitive wages
8. Need mentoring support
9. Need hiring support

Survey respondents were asked to provide the most important things that can be done to help support organizations in hiring, training, and employing sustainable, long-term local workers. Below is a summary of the most common responses (in order of response frequency):

1. Available pipeline (direct access) of trained candidates (by geographic location to connect to upcoming projects) and connecting employers with skilled workforce
2. Integration of workforce development across all phases of the SCWP (from engagement through to project submissions and into construction) and notification of requirements and opportunities that are clearly communicated, available in multiple languages, and accessible in disadvantaged communities

3. Support for competitive wages and benefits (plus other compensation needs such as housing stipends and intern wages)
4. Training that includes green infrastructure, stormwater management, and maintenance to improve knowledge across the industry
5. Increasing pipeline of simple/smaller scale nature-based solution projects (to increase overall quantity)
6. Assessing statewide hiring requirements/restrictions and the difficulty for small businesses to comply (i.e. AB5)
7. Easy paperwork and applications for employment/intern programs
8. L.A. County leveraging expertise of organizations that can help build and grow the program
9. City led/supported career workshops and hiring events

Regarding incentives for hiring and maintaining a local workforce (such as project preference points or selection incentives for firms with local workforce utilization), approximately 70% of respondents were in favor of an incentive to improve accountability for the SCWP workforce goals; however, respondents also noted: (1) the need for a clearer understanding of the definition of “local”; (2) some indicated support for incentives for worker residency rather than firm headquarters location; and (3) several indicated housing costs are a significant concern to ensuring a local workforce. Respondents that did not support an incentive were skeptical that the incentive could be structured in a way to ensure it promoted local hires and (or) had previous experiences with incentive programs not working. Several other respondents indicated that they prefer reducing the number of barriers that make it difficult to promote effective projects rather than just focusing on an incentive (where points or rewards for projects that utilize a local workforce), and others also indicated that the lack of trained and qualified candidates is the larger issue that needs to be prioritized rather than an incentive.

**As a program is established, all respondents expressed the importance of an easy, streamlined reporting program.** Several respondents indicated that payroll reporting or other existing reporting structures should be used and integrated with existing SCWP reporting mechanisms (such as the existing annual reporting). It should be noted that the smaller the business, the more administratively burdensome additional reporting is for organizations (which is counterproductive to the goals for increasing participation for these businesses). **Most respondents indicated that the desired reporting frequency should be on an annual basis; while there wasn't consensus on a specific reporting timeline, some respondents indicated that alignment with other SCWP submissions would be best (i.e. July), end of year milestones (i.e. December/January), or just to allow flexibility for businesses to report annually at a time of their choosing.**

The survey respondents provided examples of other local or regional partners or programs that may serve as successful examples for workforce development (regardless of program type). Other programs that the respondents suggested being benchmarked include the following:

- Orange County Conservation Corps (in partnership with Orange County Public Works and Rancho Santiago College)
- LA/OC Building Industry workforce program
- Conservation Corps of Long Beach:
  - With GRID Alternatives (Solar training)

- With L.A. County Parks and Recreation
- With CalFire
- In partnership with The Rivers and Mountains Conservancy River Ambassador program for the City of South Gate's Urban Orchard Project
- LAANE and Social Justice Learning Institute
- AmeriCorps
- City of Santa Monica Sustainable Landscape Professional training
- Watershed Wise Landscape Professional Certification (EPA WaterSense program for irrigation system auditing)
- Santa Monica Mountains Fund
- PV Jobs
- L.A. County America's Job Center of California

### c. Survey Key Takeaways

A consistent takeaway across the survey questions (and from the majority of respondents) was the importance for workforce development to be advanced and for all stakeholders to have clarity and communication about the direction of the program. For organizations to support the goals of SCWP, the lack of certainty on program direction impacts their ability to plan for and support the intended outcomes. It's important to note that no organization indicated a reluctance to participate or contribute to local hiring; rather they expressed an interest and desire to have clear direction and an understanding of how the program will be implemented. Municipalities need information about the program direction, and they will also need guidance about how to implement it successfully in their own localities. Additionally, several survey respondents noted that given several rounds of projects are now completed or underway, there will need to be some type of reconciliation of how a workforce program will be implemented for past, current, and future projects.

The greatest needs that were determined through this survey include having a supply of trained and skilled candidates that can be matched to upcoming projects (and corresponding pipeline of jobs). This feedback was paired with the organizations' needs for candidate recruitment and training support. These responses indicate that a training (and/or) certification program(s) is needed to align skilled workers with firms that are working on SCWP projects. Even though there was limited representation of firms that directly construct and maintain stormwater projects, many respondents (in other primary areas such as consulting, municipalities, etc.) indicated a need for skilled construction and maintenance workers was key to the long-term success of SCWP.

Several regional or local entities were identified as potential training providers that should be reviewed for successful local workforce programs. It is clear that lessons can be learned from those programs and there is regional expertise that can be used to inform (at a minimum) how a workforce program can be developed or leveraged for SWCP. As evidenced by the feedback from respondents, organizations are interested in near-term feedback on how the workforce development program is going to be established and how it will be integrated into the current framework for project submissions. Even if it will take time to ramp up the workforce development program, organizations would like to plan for the upcoming program into their work. Providing information about the anticipated program framework components will be helpful to project proponents and stakeholders moving forward. Based on the survey responses, this includes establishing the minimum program framework including: Who is the targeted workforce?; Who will conduct the training?; What is the pipeline for jobs?; and How will trained candidates be connected to job opportunities?

#### 4. REVIEW OF WORKFORCE DEVELOPMENT PROGRAM BEST PRACTICES

Municipalities across the nation are delivering large scale stormwater and green infrastructure programs to meet a range of needs at a local and watershed-specific level. The age and maturity of these programs varies and the extent to which they have established training and/or certification programs also vary. To ensure best practices were well understood, programs with relevant experience in developing and implementing training or workforce programs were reviewed, and a sampling of these best practices are summarized in this document. These include a variety of programs nationally (at large municipalities) and some programs locally that perform more specialized or smaller scale cohort training. Given many successful models exist which could be used by the SCWP, the key takeaways are provided to identify possible near-term actions or partners that could be used to help pilot and scale up a workforce development program for SCWP.

References in this report in Section 5 include best practices and lessons learned from some of the following organizations or programs operating in Los Angeles:

- The Countywide Youth Bridges Program and Youth@Work
- LA:RISE (Regional Initiative for Social Enterprise)
- L.A. Conservation Corps
- L.A. County Department of Economic Opportunity: APEX and Build Back Better
- PLACE (Preparing Los Angeles for County Employment)
- Council for Watershed Health
- Laborer’s International Union of North America (LIUNA) Locals 300 & 1309
- Theodore Payne Foundation - CA Native Plant Landscaper Certification

Additionally, programs nationally that were reviewed include the following:

- Chicago IL (Green Corps Chicago)
- Kansas City MO (Bridging the Gap)
- Groundwork Rhode Island, RI
- District of Columbia Water and Sewer Authority
- Boston, MA
- Peoria, IL
- Harrisburg, PA
- New York, NY
- Philadelphia, PA
- National Congress of American Indians, Workforce Development Toolkit (National)
- EnviroCert - National Green Infrastructure Certification Program (NGICP) (National)

## 5. WORKFORCE DEVELOPMENT BEST PRACTICES AND FINDINGS

Based on collective effort in developing the job pipeline projections model, conducting the workforce barriers stakeholder survey, and reviewing other programs, best practices and findings can be categorized into the following programmatic areas related to developing and implementing a workforce development program (Program):

1. **Framework/structure:** this category covers findings associated with high-level governance structure, scope, schedule and timeline, Program evolution, and priorities and success metrics.
2. **Candidate training:** this category covers findings related to candidate recruitment and selection, the scope of training, and the timeline and needs for training to meet the pace of SCWP project implementation.
3. **Candidate placement:** this category covers findings related to connecting trained candidates to available employers and ensuring successful onboarding and job placement.
4. **Reporting/monitoring:** this category covers findings related to the development of reporting mechanisms, establishing reporting frequencies, and providing guidance to participating organizations to ensure successful SCWP monitoring of ordinance and local requirements.
5. **Program funding:** this category covers findings associated with funding needs and funding sustainability for successful development and rollout as the Program matures and evolves.

A total of 13 findings are summarized below into these main programmatic categories; these findings are based on the best practices learned through this collective effort, and they represent opportunities and considerations for the future development of a workforce development and training program.

Figure 5: Whitepaper findings connected to programmatic areas for developing and implementing a workforce development program

FINDING	PROGRAM ELEMENT					SOURCE		
	Framework/Structure	Candidate Training	Candidate Placement	Reporting/Monitoring	Program Funding	Model	Survey	Muni Best Practices
<b>Finding 1:</b> Trained workers are needed now	x	x	x			x	x	
<b>Finding 2:</b> Construction and O&M jobs have greatest need now / O&M jobs are the greatest need over time		x	x			x	x	x
<b>Finding 3:</b> Career pathways will ensure a sustainable workforce and maximize SCWP outcomes		x	x			x	x	x
<b>Finding 4:</b> Firms/municipalities need guidance on workforce program timing, requirements, and definitions (past and future projects)	x			x			x	
<b>Finding 5:</b> Firms/municipalities need pipeline of trained and employable candidates		x	x			x	x	
<b>Finding 6:</b> Firms/municipalities need candidate recruitment, placement, and hiring support			x				x	
<b>Finding 7:</b> Firms need support providing competitive wages and benefits to candidates	x		x		x		x	x
<b>Finding 8:</b> Municipalities lack knowledge of their needs for skilled and trained workforce	x			x			x	
<b>Finding 9:</b> Housing and inflation costs may impact local workforce pipeline	x	x	x				x	x
<b>Finding 10:</b> Consistent and sustained long term investments are needed for candidate training and soft skills / transportation / wages					x	x	x	x
<b>Finding 11:</b> Regional expertise exists both for workforce training and stormwater curriculum but needs to be scaled/expanded		x	x			x	x	x
<b>Finding 12:</b> Regional expertise exists for job placement but it is not connected to SCWP	x		x					x

### **Finding 1: Trained workers are needed now**

On July 25, 2023, the Los Angeles County Board of Supervisors approved a motion to accelerate the implementation of SCWP, and on August 8, 2023, the latest round of Stormwater Investment Plans were awarded totaling over \$130M. With several rounds of projects already awarded, design and construction of projects is already well underway, and every project that is implemented requires the use of a skilled and trained workforce during various elements of the project delivery including: stakeholder engagement, design, construction, monitoring, and maintenance. The importance of ensuring stormwater improvements are well-constructed and maintained cannot be overstated and it is a point that is well documented in the literature<sup>2</sup>; this need for targeted construction and maintenance work is a key driver to developing a trained, skilled workforce. In Kansas City, for example the Green Stewards workforce development program, was established with the single intention of helping the City to maintain 230 green infrastructure installations put in place as part of the City's Smart Sewer Program. Los Angeles County will soon be in a similar position as SCWP-funded projects come online. Without a dedicated workforce to undertake operations and maintenance, projects could fail to perform technically (i.e. clog, don't clean or capture stormwater, etc.), and SCWP could be vulnerable to accountability concerns, public perception concerns, and(or) cost impacts (due to rehabilitation or replacement of projects).

The ongoing, annual investment and expected ramp up of SCWP projects is well documented based on the modeling projections, so the need for a trained and skilled workforce is well understood with modeling projections showing over 900 trained and skilled workers were needed in 2023 alone (over 350 of which need a construction-dedicated focus). While this number appears large, the model does not assert that the positions need to be filled by entirely new workers (or newly created positions). Some of this capacity may be backfilled by existing skilled labor. Further, the model assumes projects come online in the year of the award, which may overestimate the immediate need for labor as many projects take more than a year to complete design, permit, and build. Nevertheless, the deficit of skilled workers was further substantiated by the workforce barriers stakeholder survey feedback provided by firms; survey respondents overwhelmingly indicated that there was a lack of local workers (quantity) and a lack of skilled workers (various levels and types) to fill the needed positions for SCWP.

#### **Recommended Next Steps:**

**It is recommended that FCD refer project proponents to existing workforce pipelines like the Los Angeles Conservation Corps' (LACC) program for help finding workers while a workforce program is being established.** Implementation of a workforce training program is overdue and should be quickly accelerated to ensure that the pipeline of candidates will be available to meet project demand. Based on reviewing the LACC program, tapping into existing organizations, like LACC for some types of construction and maintenance projects, may be one way to begin immediately filling the workforce gap, as these workers already exist and are trained for many applicable skills.

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<sup>2</sup> USEPA. 2013. The Importance of Operation and Maintenance for the Long-Term Success of Green Infrastructure. PA-832-R-12-007. March, 2013.

**Finding 2: Construction and O&M jobs have greatest need now / O&M jobs are the greatest need over time**

Beginning in the fall of 2020, nearly \$280M annually has been allocated to multi-benefit projects and programs that further the goals of the SCWP. This is an extraordinary investment compared to regional historic funding for multi-benefit stormwater projects. Given this financial commitment, there is a new need in the region for skilled workers across all project phases (including construction, monitoring, operations and maintenance, etc.) with annual local workforce FTEs needs totaling over 900 in 2023 and remaining high through at least 2033. For example, in ten years (2033), project modeling shows that there will still be a need for more than 750 skilled and trained FTEs to meet the demands of SCWP projects.

By far, the greatest need identified in the near-term and long-term is for a skilled operations and maintenance workforce. In modeling the long-term projections for workforce needs, demand for operations and maintenance workers grows year-over-year as new projects are constructed and commissioned. For example, the need for operations and maintenance workers grows from approximately <50 FTEs in 2023 and increases each year to a maximum projected regional need of nearly 300 FTEs in years 2048-2053 (25-30 years from now). These modeling projections were further supported by the results of the workforce barriers stakeholder survey which revealed firms were most concerned about the lack of qualified candidates for operations and maintenance over all other phases of a project. This finding is substantiated by reviews of other programs led by community-based organizations. For example, Groundworks Rhode Island and the aforementioned Green Stewards program offers job training and employment focused on O&M when it comes to their activities in the stormwater space. The long-term need for O&M workers remains high once a program is established and provides stable jobs within local communities.

**Recommended Next Steps:**

This finding indicates that the highest value investment for both near-term needs and long-term sustained needs is to train candidates in operations and maintenance work to ensure firms receive qualified candidates and that projects are well-maintained and function over time. **It is recommended that a near-term pilot program be established with a focus on training workers for operations and maintenance of stormwater projects.** Upon successful job placement of an initial cohort, other skillsets could be incorporated into the training and the training program expanded. **To support the funding needs long term, the creation of an O&M endowment may be desired, to essentially set aside unused funds across the Program, which can support additional O&M job creation.** Another is to gradually funnel funds from Programs that may become less useful over time towards O&M activities. One likely candidate, as previously mentioned, is the Technical Resources Program, which will likely become less useful when new project development activities decline.

**Finding 3: Career Pathways will Ensure a Sustainable Workforce and Maximize SCWP Outcomes**

As referenced in Finding 2, a wide range of skill sets is needed across the local workforce to meet various phases of project delivery. Additionally, skilled workers are needed at varying levels of leadership and organizational structure from: entry level workers (i.e. junior engineers/planners; construction laborers; etc.); to skilled trades (i.e. drivers/operators; surveyors; etc.); to project management and organizational leadership (i.e. professional engineers; academics; owners/directors, etc.). In reviewing other workforce

programs several were developed to train workers for a job today but also establish a career pipeline to future job growth opportunities. In at least one instance (Groundworks Rhode Island), the sustained need for construction, operations and maintenance work has resulted in the creation of a fully licensed landscape design/build social enterprise non-profit with long-term, full-time employees. Other programs, such as the L.A. County Youth Bridges Program and Youth@Work, focus on getting unskilled labor, particularly at-risk youth individuals, into paid internships and entry-level jobs that can lead to longer term and fulfilling careers. Given this model is well established, the District could participate in the Youth@Work program by hosting interns to create pathways to a range of jobs, ranging from clerical to project maintenance positions. One example of an achievable career pathway for field-oriented employees is beginning with an entry-level laborer position with the following promotions: laborer; equipment operator (or other skilled trade); site foreman (or crew lead); construction manager; project manager; etc.

The above program references demonstrate the importance of creating a career pathway and are supported with feedback from survey respondents on this topic. The second highest ranked need from respondents was the integration of workforce development across all areas of the SCWP; respondents noted that entry level positions could be utilized in multiple aspects of projects such as public engagement, design, project submissions and administrative functions, and construction. This feedback demonstrates the interconnectedness of all project phases and the importance for trained workers to be available across all organizational levels to ensure project success. Explicitly considering career pathways when designing a workforce training program helps maximize training investments in workers that will remain in the region and in the industry to help build and grow SCWP investments. It should be noted that certain types of projects and employers may maximize the success of training entry-level workers. When active mentoring and hands-on experience is provided, entry-level workers tend to have greater levels of success. For example, distributed stormwater projects have the potential as a major job creator and can serve as a valuable training ground for employees to gain skills in the field.

#### **Recommended Next Steps:**

**It is recommended that the initial pilot training program scope be developed with intended promotional pathways in mind (and allows for training program expansion to broaden cohort expertise in future trainings).** Building on Finding 2, a focused training program for operations and maintenance could start with training entry-level field laborers to provide manual labor on construction sites or install cisterns in residential settings, then expand next to skilled trades (such as equipment operators), then expand to training for site foreman (or crew leads), etc. For example, the training program could be developed with multiple levels which build on one another to expand breadth and depth of expertise. This model will ensure that entry-level staff continue to be supported and will be successful in their career pathways. Further, cross training for adjacent industries related to construction and maintenance (i.e. vertical construction, grounds maintenance, etc.) can also help to ensure career pathways. This should be considered as part of the program development.

**Finding 4: Firms/municipalities need guidance on workforce program timing, requirements, and definitions (past and future projects)**

As referenced in Finding 1 (above), over \$130 million of new Stormwater Investment Plans were awarded in August 2023, and several near-term key SCWP milestones for municipalities are approaching including submission of the Municipal Annual Progress/Expenditure Reports (due December 31, 2023) and FY24-25 Annual Plans (Spring 2024). This ongoing investment and upcoming reporting milestones elevate the importance of establishing a workforce training program and providing programmatic direction to municipalities so future plans can be integrated into upcoming work. SCWP participating organizations that were surveyed indicated a need to have programmatic direction on: future workforce requirements overall, the timing for meeting upcoming requirements, and information on how the requirements will be tracked, monitored, and reported.

As evidenced by the feedback from respondents, organizations are interested in near-term feedback on how the workforce development program is going to be established and how it will be integrated into the current framework for project submissions. Even if it will take time to ramp up the workforce development program, organizations would like to plan for the upcoming program in their work, and providing information about the key program framework components will be helpful to project proponents and stakeholders moving forward.

**Recommended Next Steps:**

**It is recommended that the District partner with an established training provider to quickly launch the first training cohort within 6 months and communicate a ramp up strategy to municipalities and project applicants.** There are several well-established potential partners in the Region that could accelerate implementation. For example, the LACC provides a great example of a program that started with a small cohort of participants to meet a very specific need and expanded over time. Based on reviews of the LACC, they now employ over 400 Corps members annually delivering a broad range of conservation services including though not limited to construction and maintenance of landscape and green infrastructure projects. One additional consideration for scaling up and establishing a workforce development framework is possible coordination with LiUNA. Given LiUNA already has an established model for new training programs based on demand for labor, utilizing this existing model could allow guidance to be developed quickly related to the job needs pipeline.

**Finding 5: Firms/municipalities need a pipeline of trained and employable candidates**

Workforce barriers stakeholder survey respondents indicated that ensuring there is a well-established connection of trained workers to employment opportunities and the pipeline of projects is key to SCWP success and their firms' success. In fact, this was the highest ranked response when asked "what could be done to help support organizations in hiring, training, and employing sustainable, long term local workers". Respondents indicated an interest and willingness to participate and grow their local employee workforce, and they are seeking direction on how the program will evolve to help them achieve their needs. Survey respondents also indicated the second greatest barrier to increasing utilization of a local workforce for SCWP projects was uncertainty about the SCWP project pipeline and corresponding job needs. **This finding indicates that closely pairing the SCWP project pipeline and funding to a workforce training program will be key to easing concerns about meeting upcoming local hiring requirements and to**

help firms and municipalities plan for future hiring. By utilizing the jobs model provided as part of this effort, a targeted workforce program can be developed to train the right workers at the right times to avoid misaligned job demand and trained workers. In reviewing several other workforce programs, many organizations closely tie training opportunities to job needs. As noted above, LiUNA is one example of an organization that closely ties their training programs to job availability, and the National Congress of American Indians, in their Workforce Development Toolkit, also describes a need to focus workforce development efforts in fields where jobs are or will become most plentiful. A number of the organizations including GreenCorps Chicago and Groundwork Rhode Island, include cross functional training and certifications like OSHA courses, First Aid and CPR, among others, while including specific stormwater focused training.

#### **Recommended Next Steps:**

**It is recommended that the District publish a schedule for upcoming training cohorts (with a commitment on the number of candidates to be trained by quarter or by year) to help firms and municipalities to plan for successful entry-level candidate job placement.** This schedule and process should be communicated as quickly as possible during regular program reporting and updates.

#### **Finding 6: Firms/municipalities need candidate recruitment, placement, and hiring support**

The survey indicated that firms and municipalities need support connecting trained workers to available jobs. When asked about the top barriers to increasing utilization of a local workforce, firms indicated needing recruitment, placement, and hiring support as the third highest barrier. This finding indicates that establishing a training program is critical to SCWP success, but successful placement of candidates within firms helps to ensure a successful career pathway for candidates. “Wrap around” services can be considered those that go beyond the technical training, and may include recruitment, placement, and hiring support (for both candidates and employers). Based on reviews of other local and national programs, LA:RISE stands out as an organization that effectively bridges the gap between those in need of employment (often homeless or underemployed individuals), and employers (for example social enterprises like LACC). Full wrap around support services are provided to candidates during their career path (to help remove personal barriers which may cause instability for employment), and partner employers are similarly well informed about their roles in the process and receive recruitment services from the program; many other national programs reviewed also provide varying levels of wrap around services (although it should be acknowledged that this is costly).

#### **Recommended Next Steps:**

**It is recommended that a training program include full wrap around services to help both candidates and firms/municipalities ensure successful long-term placement of entry level workers; these wrap around services should support recruitment, placement, and hiring to help align candidates with the right employers.** The types of wrap around services should be determined early, and cost estimates should be developed (per candidate or per cohort), and budgeted for as part of upcoming budget cycles (A total cost per candidate should be established for all elements of the workforce development program: recruitment, training, placement, mentoring, transportation, etc.). Further, the overall success metrics of a training program (with wrap around services) should be established early, and this information should be published regularly (i.e. cost per candidate vs. candidate success/retention). At regular intervals, it is

recommended that the level of wrap around services and types of services be evaluated and adaptively managed to maximize effectiveness. Lastly, creating a mechanism on the SWCP website/portal which connects candidates and employers would be a valuable tool for all entities.

**Finding 7: Firms need support providing competitive wages and benefits to entry level candidates**

Complementary to Finding 6, to ensure the long-term sustainability of entry level positions it may require assisting firms with ensuring competitive wages for the region. Firms that responded to the workforce barriers stakeholder survey noted this as a need and commented on the significant effort required to invest in entry level new hires with the possibility of retention concerns and turnover after making significant investments. In particular for small, local businesses, this risk and uncertainty of taking on new hires can be a significant time and financial commitment. **This finding suggests developing financial support pathways for small, local businesses for supplementing training, onboarding, or benefits is needed through grants, federal funding, or local support resources.** Youth@Work is one example of an organization that helps to reduce the risk of onboarding by employers by fully funding the first 160 hours of a new internship or entry level position. While helping to find the right fit between candidates' competency and employer needs, Youth@Work also provides the candidate with soft skills training such as interview preparation, interpersonal interactions and financial literacy, all of which help them to perform and reduces possible attrition.

**Recommended Next Steps:**

**It is recommended that the financial needs of small, local businesses be surveyed (or further analyzed) to determine the level of financial support needed.** Wherever possible, alternative funding sources should be assessed to support small, local businesses at a programmatic level; small, local businesses may not have the time or capacity to seek state, federal, or grant funding, and it may be programmatically valuable for the District (or other partners) to seek out this funding on behalf of small, local businesses to aid in their success.

**Finding 8: Municipalities lack knowledge of their needs for skilled and trained workforce**

Based on the results of the survey, firms indicated that there was a general lack of awareness within municipalities about project maintenance needs and gaps in knowledge about near- and long-term workforce needs. Project owners (including municipalities) may not understand the long-term investment needed to ensure that new stormwater projects are capitalized, integrated into asset inventories, and managed similarly to other "traditional" infrastructure such as water, sewer, roads, and parks. **This finding suggests that support from the SCWP may be needed to educate and provide program assistance to municipalities about integration of stormwater assets into their inventories and to provide educational workshops on how municipalities best manage and maintain assets, including the human capital needed to maintain this infrastructure.** There are many ways that this information could be shared; for example, this type of information could be presented as part of a required information session that project applicants are required to attend prior to applying for SCWP funds.

### Recommended Next Steps:

It is recommended that SCWP provide regular educational opportunities for municipalities to learn about building and maintaining stormwater projects. To determine municipality needs fully and where to focus training, it may be valuable to poll or survey municipalities about topics that they would find most useful. At a minimum, it is recommended that overall training for how to successfully scale up stormwater implementation within municipalities be provided with topics including: maintenance scopes and frequencies by project type, operations and maintenance FTEs for different scales of programs, forecasting maintenance costs, etc.

### **Finding 9: Housing and inflation costs may impact local workforce pipeline**

Survey respondents indicated concerns about available pipelines of local hires due to rising housing and inflation costs which make it difficult for residents (and workers from different wage levels) to live locally. While this is not a problem isolated to the construction or maintenance industries or SCWP, it may be worth consideration as a local workforce program is developed. For example, not only should training costs be considered for candidates, but other soft costs should also be evaluated to maximize the ability for candidates to participate in trainings including: wages, transportation costs, meals, etc. This practice of ensuring all barriers are eliminated for candidates to successfully participate in training programs is key, and it is commonly utilized across other programs that were reviewed. For example, as previously mentioned, Youth@Work provides funding for initial employment periods and LA:RISE provides case management services and a personal support provider (PSP) who works with employees to help remove barriers that emerge outside of the direct employee/employer relationship.

### Recommended Next Steps:

It is recommended that all costs associated with training, job placement, and onboarding/retention be included as part of a workforce program so the full suite of expenses are understood and calculated at the onset of the Program (and projected over time). These costs should be assessed early in the program development process.

### **Finding 10: Consistent and sustained long-term investments are needed for candidate training and soft skills / transportation / wages**

Consistent with Findings 1 and 2, the SCWP's sustained and long-term investments directly connect to project delivery needs for a trained, skilled workforce. The job pipeline projections model indicates that the needs for specific skillsets will vary over the upcoming decades – a construction workforce is heavily needed in the near-term, while operations and maintenance staff needs grow steadily in the upcoming 5-10 years. **This finding suggests that available budgets for workforce training should be proactively planned and monitored to target training for the right skillsets at the right times;** while the needs will evolve for training, there is a need to ensure long-term dedicated funding aligns the pipeline of skilled workers with project demand. Further, survey respondents and the review of other programs indicated that there is a need to financially support soft skills development, transportation costs, and the impacts of lost wages (due to the time commitment for training programs). All of these costs should be considered when developing a workforce program. Several other programs have demonstrated that these

components directly positively impacted the success rate of candidates completing training programs and being successfully placed in jobs. The Countywide Youth Bridges, Youth@Work, and LA:RISE programs provide a few examples where comprehensive case management and soft-skills training are in place to ensure that participants have the support and skills needed to succeed in entering into and thriving within the workforce.

#### **Recommended Next Steps:**

**It is recommended that long-term budgeting projections be defined now to ensure program transparency and provide assurance to all stakeholders that committed investments will be made for the success of workforce development over years and decades to come.** It is reasonable to expect that projections will be made based on initial decisions about how workforce development will be implemented, and it should be acknowledged that the program will grow and evolve over time.

#### **Finding 11: Regional expertise exists for workforce training and stormwater curriculum but needs to be scaled / expanded**

Through review of local workforce programs and interviews with several organizations, it is clear that there are already meaningful workforce training programs operating throughout the region, however workforce training is “decentralized”, it is spread across many organizations, and is occurring at a small scale. Further, several organizations provide training in industries adjacent to SCWP-related implementation but don’t currently provide comprehensive training for all of the skills needed for either stormwater construction or maintenance. In addition to other organizations already referenced, a sampling of local organizations which provide small-scale training focused on a specific industry include:

- Santa Monica Mountains Fund provides internships and mentorship to disadvantaged youth and underrepresented groups with a focus on conservation, seed collection, and operation of a native plant nursery.
- Conservation Corps of Long Beach provides solar training and partners with employers to connect candidates with employment opportunities, in addition to a range of stormwater projects and greenbelts.
- The Los Angeles and San Gabriel Rivers Watershed Council’s Sustainable Landscapes Seminar series provides training on sustainable urban landscaping for design landscape professionals.
- Los Angeles County Economic Development Corporation (LAECD), a nonprofit in the LA region, is currently focusing on training in the “Goods Movement Ecosystem” industry for sectors that transport and produce essential goods; while this training is not directly applicable to SCWP, LAECD demonstrates a viable framework for training entry level workers.
- Qualified Water Efficient Landscaper (QWEL) Certificate Program is geared toward traditional landscapers with a focus on irrigation and turf management. The group has been interested in expanding into operations and maintenance training but has not done so to date.
- Theodore Payne Foundation hosts trainings for a California Native Plant Landscaper Certificate Program which is focused on landscape focused training for entry level positions.
- LA Conservation Corps is a local workforce and training provider with a long history of providing training and entry level workforce development.

There are many skills needed to see stormwater improvement projects through from planning and design to construction and long-term operation and maintenance. Yet other skills are needed for businesses and individuals to succeed in new industries or workplace situations. Organizations throughout the region are providing some of the training needed for project delivery and creation of stable sustainable jobs, but these programs do not cover all of the needs, are operating disparately, and are not synchronized in a way that maximizes their utility for the SCWP. Some examples of SCWP-applicable training topics from the region and example organizations/programs providing them include:

- Cross-functional construction skills and trades (LiUNA, LACC)
- Cross-industry transferable certifications like NCCER, OSHA, CPR, and first aid credentials (LiUNA, LACC).
- Entry level labor and park and landscape maintenance (PLACE)
- Fundamentals of green infrastructure planning, design, construction and maintenance (LACC, Council for Watershed Health, National Green Infrastructure Certification Program; note that this is not locally deployed at this time but could be expanded to the LA region).
- Native plant design, landscaping and care (Theodore Payne Foundation’s California Native Plant Landscaper Certificate Program)
- Internships watershed management and conservation (Council for Watershed Health)
- Soft skills such as interview prep, interpersonal communications, financial literacy, computer literacy as well as case management services and guidance counseling (Youth@Work, Countywide Youth Bridges Program, LA:RISE)
- Local business creation, development and financial support (APEX and Build Back Better)
- Training via community colleges with established mechanism for low-cost training (Los Angeles County Economic Development Corporation, LAEDC)

#### Recommended Next Steps:

**Beyond Finding 4 (“small, fast pilot cohort”), it is recommended that local established training, job placement, and wrap around service providers be identified and assembled into a team to deliver the long-term SCWP tailored training.** The above list provides a small window into some types of training that could benefit and cater to SCWP workforce needs. If structured correctly, some of the organizations and curriculum mentioned above could potentially be assembled into a more organized and intentional training program aimed at meeting the specific workforce needs of the SCWP.

As referenced in finding 1, LACC has demonstrated success in training; a suggested model could be to connect LACC with providers for wrap around services (at the desired levels) and job placement (finding 12) to quickly launch a pilot training cohort. With this approach, the partner(s) with a successful track record of workforce training could be utilized to initiate a pilot training program more quickly, with the possibility for expanding and building the Program over time (both scope and size). It is recommended to initiate a pilot cohort within the next six months for approximately 15-20 candidates using the above approach. It is recommended that the District develop a means for tracking how well individual program resources are meeting each program’s need with a redistribution of funds, as needed, based on those findings.

**Finding 12: Regional expertise exists for job placement, but it is not connected to SCWP**

There are several key organizations in the LA region that have a robust focus and mission to deliver job placement and organizational support, however, they are currently not connected to supporting workforce development needs for the SCWP. The LA County Department of Economic Opportunity (DEO) has a dedicated focus on supporting workforce needs across the County and assists various sizes of employers across a variety of industries. Their dedicated structure is well positioned to support SCWP workforce growth but formalized coordination between DEO and FCD staff would be needed to tailor workforce support to the needs of the SCWP. Further, resources available via Workforce Investment Boards is another helpful mechanism for firms to seek assistance and get new worker training and education subsidized. As an example, LA:RISE's success is linked to its numerous partnerships including with job placement partners including WorkSource and America's Job Center of California.

**Recommended Next Steps:**

**It is recommended that FCD formalize a connection with DEO and establish the roles and responsibilities needed for the SCWP's workforce program.** The region is well positioned with organizations that have a mission, structure, and resources available for job placement, but a formalized structure specifically for SCWP is needed. Establishing this connection will result in expedited job placement support for firms and municipalities looking to hire trained candidates.

## 6. REFERENCES

- Associated General Contractors of California. 2022. Wage Scale Book: Northern and Southern California. Available online at <https://www.agc-ca.org/wp-content/uploads/2021/10/wage-scale-book-north-south-combined-12.8.2020.pdf>
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<https://www.ssa.gov/oact/cola/awidevelop.html>

## 7. KEY DEFINITIONS

Term	Source	Definition
Targeted worker	<p>Updated Board Policy, effective June 11, 2019</p> <ul style="list-style-type: none"> <li>• <a href="https://dpw.lacounty.gov/contracts/LTWHP.aspx">https://dpw.lacounty.gov/contracts/LTWHP.aspx</a></li> <li>• <a href="https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf">https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf</a></li> </ul>	<p>For Capital and construction projects, a targeted Worker is a County resident who has career-limiting circumstances, such as:</p> <ul style="list-style-type: none"> <li>• Documented annual income at or below 100% Federal Poverty Level</li> <li>• History of involvement with the criminal justice system</li> <li>• Current recipient of government cash or food assistance benefits</li> <li>• Homeless or has been homeless within the last year</li> <li>• Veteran or eligible spouse of a veteran</li> <li>• Eligible migrant and seasonal farmworker</li> <li>• Protracted unemployment (six months or more)</li> <li>• English language learner</li> <li>• Low level of literacy</li> <li>• Disabled</li> <li>• Custodial single parent</li> <li>• Former foster youth</li> <li>• No high school diploma or GED</li> <li>• Older individual (55+)</li> </ul>
Local worker	<ul style="list-style-type: none"> <li>• <a href="https://dpw.lacounty.gov/contracts/LTWHP.aspx">https://dpw.lacounty.gov/contracts/LTWHP.aspx</a></li> <li>• <a href="https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf">https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf</a></li> </ul>	<p>Local Workers are residents living in specific communities where the average percentage of households are living significantly below the Federal Poverty Level (FPL). For example, a household of four living with an annual income of \$49,200 or less.</p>
Local and Targeted Worker Hire Program	<p>Board of Supervisors, October 2016 (Sunsets on June 11, 2023)</p> <ul style="list-style-type: none"> <li>• <a href="https://dpw.lacounty.gov/contracts/LTWHP.aspx">https://dpw.lacounty.gov/contracts/LTWHP.aspx</a></li> <li>• <a href="https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf">https://dpw.lacounty.gov/contracts/resources/doc/APPROVED-Board-Policy-for-Countywide-Local-and-Targeted-Worker-Hiring.pdf</a></li> </ul>	<p>Ensures local workers have employment opportunities on projects within their own communities. This policy sets a goal to hire 30% Local Workers and 10% Targeted Workers on all County capital and construction projects valued at \$500,000 or more.</p>

## 8. APPENDICES

- a. Appendix A: SCW Program Job Capacity Model Details