Engaging Disadvantaged Communities in Resource Management

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Los Angeles, 2013

alcanza

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Abstract

Water planning and management has historically been a technocratic endeavor implemented by large agencies, often with minimal public participation. To address this issue, the State of California mandates public participation in water planning and management processes receiving public funds. Proposition 84 led to legislation requiring disadvantaged community (DAC) participation in the Integrated Regional Water Management Plan (IRWM) program. Despite these efforts, the number of State-funded projects in DACs is disproportionately low. This study is an evaluation of a planning process implemented with DACs in the City of Compton and the City of Lynwood to develop projects that meet IRWM guidelines. We employ a "value-engaged" evaluation approach, grounded on inclusionary principles to define effective engagement of DACs in resource management and planning. Based on our evaluation, we conclude with a set of recommendations for engaging urban disadvantaged communities in water management and planning processes.

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Acknowledgements

I am immensely grateful to community members in the City of Compton and the City of Lynwood. This work is made possible with funding and support from the San Gabriel & Lower Los Angeles Rivers and Mountains Conservancy, the Switzer Foundation, the UCLA Department of Urban and Regional Planning, and the UCLA Luskin Center for Innovation. I am thankful for all the support I received, in particular from Miguel Luna and Belinda Faustinos, who were instrumental to this work. The partnerships with Compton Jr. Posse, From Lot to Spot, City of Lynwood, and City of Compton were pivotal to project development in each city. Glen Dake, Mark Hanna and Rita Kampalath generously contributed their technical expertise. Perla Guzman, Marina Magaña and Connie Chauv were infinitely helpful. The guidance of the academic community at the University of California, Los Angeles was invaluable in the development of this evaluation. In particular, Prof. Christina Christie, Prof. Leo Estrada, Prof. Tim Higgins, Prof. Stephanie Pincetl, Prof. Paul Ong, Chirag Rabari and Karna Wong.

Key words:

outreach, engagement, participation, disadvantaged communities, low-income, Compton, Lynwood, resources, water, management, planning, urban, green space, parks.

Funders

This project is largely funded by the Rivers and Mountains Conservancy through the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84).

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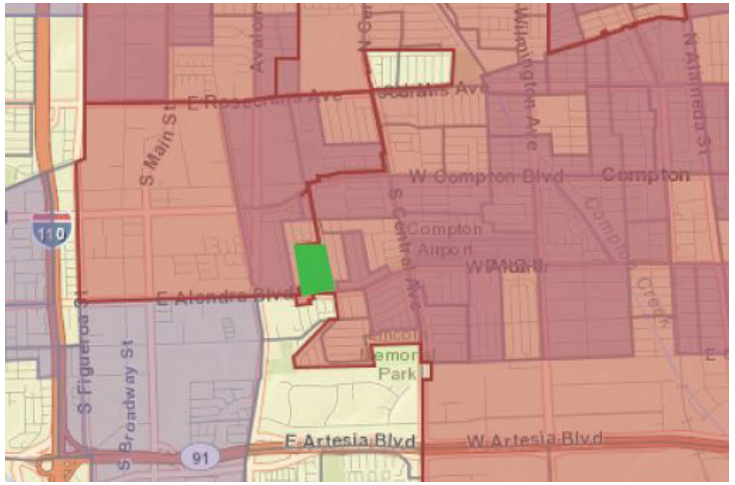
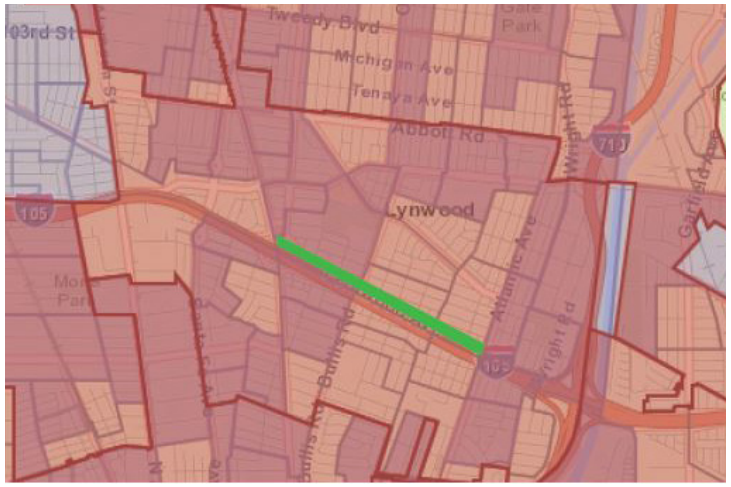
Executive Summary

During 2012, disadvantaged communities[1] (DACs) in the City of Lynwood and the City of Compton each planned a multi-benefit watershed park. The objective of these parks is to improve surface water quality while providing recreational, open space, and habitat benefits. Alcanza led the planning of the watershed parks with funding from the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy. Alcanza's mission is to develop sustainable projects that promote resilient, healthy and vibrant communities. Alcanza is a fiscally sponsored project of the Anahuak Youth Sports Association (Anahuak), a non-profit organization. Miriam Torres (author of this evaluation) and Miguel Luna devised the planning process implemented in the cities of Compton and Lynwood. This report evaluates the engagement of DACs in planning the proposed watershed parks. This case study is intended to offer lessons learned from the process and inform how agencies can effectively engage DACs in resource management.

This planning process was a pilot to develop multi-benefit projects that meet the region's water management objectives to compete for Integrated Regional Water Management (IRWM) Plan funds. Multi-benefit watershed parks can be part of a successful IRWM plan. The State created the IRWM Plan funding process to encourage the integration of water management planning throughout California. The State intended for the IRWM program to bring agencies and all watershed stakeholders, including disadvantaged communities, to solve regional water challenges. In 2009, Assembly Bill 626 (Eng) mandated that 10% of all IRWM plan funds awarded in each region get designated to include DACs in IRWM planning and address their water needs (CWC§83002(c)(i)). However, in the Greater Los Angeles region, disadvantaged



City of Compton* Alondra Site



City of Lynwood* Fernwood Site

1. A disadvantaged community is defined as a "community with an annual median household income that is less than 80 percent of the statewide annual median household income (PRC§ 7500(g))"" (as cited in DWR, 2010)

* Source: Los Angeles County Disadvantaged Communities. (2012). ARC GIS ESRI. Department of Water Resources

communities have not received this minimum allocation of Proposition 84 IRWM funding for projects.

Throughout California, DACs are plagued with a variety of pernicious water issues that range from contaminated drinking water to wastewater and surface water quality problems. These communities lack the resources and technical knowledge to address their problems or to engage in competitive funding processes such as the IRWM program. There is a legal imperative to engage disadvantaged communities in planning water-related projects but it remains to be effectively implemented.

Alcanza embarked on this process with a goal of planning multi-benefit projects that reflect the needs of the community. In collaboration with a community-based organization, we conducted a series of four workshops in each city. Over 80 community members participated in the planning process from selecting a site to designing each park. Alcanza enlisted a technical team to ensure our projects would meet the requirements of a local IRWM plan. Geosyntec modeled a combined total of 12 sites for water supply, water quality, habitat, recreation, and flood management benefits. In each case, community members selected the site with the highest potential to meet the objectives of the IRWM plan. GDML's landscape architect worked with residents to include features that maximize water and habitat benefits while responding to the communities' recreational and open space needs. Project-specific information is in included in Appendices D-I.

We were successful in submitting applications with agency sponsorship to compete for IRWM funding.

We submitted the City of Lynwood's application, Fernwood Water Improvement Park, to the Gateway Water Management Authority's (Gateway region)[2] competitive IRWM process. Based on the Gateway region's IRWM plan objectives and Statewide requirements, the consultant team ranked the Lynwood project #1 out of 61 projects submitted (GEI, 2012). Fernwood Water Improvement Park was selected by the Gateway region to be included in the regional application for funding to the State's Department of Water Resources (DWR).

We submitted Alondra Regional Park, with sponsorship from the City of Compton, to the Greater Los Angeles County region's project selection process. The South Bay Steering Committee selected the watershed park to advance to the regional level. Unfortunately, Alondra Regional Park was not selected by the Leadership Committee to be included in the application to DWR.

This report focuses on evaluating the Alcanza outreach and engagement process in Lynwood and Compton. The first chapter provides an overview of the process, and background information on the local IRWM plan regions. Chapter two is a literature review that identifies principles of engagement (Table 2) for the evaluation of the case studies.

In the third chapter we explain our value-engaged evaluation approach, data analysis, and methodology. The procedures involved in interviewing 12 community members that attend-

2. The Greater LA County region and Gateway region are two of the four distinct regions approved by the Department of Water Resources to compete for Proposition 84 IRWM plan funds in the Los Angeles Sub-region Funding Area.

ed the workshops are detailed in this section. This chapter describes how we utilized the principles of engagement to conduct a process and outcome evaluation.

Chapter four is the analysis and evaluation of the Alcanza planning process. We found community members to be highly satisfied with the information presented, the concept plan reflecting their needs and their ability to influence the planning process. All interviewees retained the water education we provided and were highly satisfied overall with the planning process. The planning process meets all the principles of engagement and interviewed community members confirm this assessment.

Finally, we conclude in the last chapter with our recommendations for future engagement of disadvantaged communities. Our recommendations are specific to processes that seek to plan multi-benefit projects with urban DACs. Some of the key recommendations include: engaging DACs through a community-based organization, creating a planning process that is linguistically and culturally sensitive, facilitating a conversation between community members and technical experts, conducting a process where community members are an integral part of the production of the project and the implementation phase.

The contribution of DAC communities is vital to the development of projects that address long-standing water problems and meet community needs. Engaging disadvantaged communities in water management should be a meaningful and inclusionary process that results in social and environmental benefits for the community and the region. DAC residents amass a wealth of local knowledge that is critical when identifying problems and solutions. In the case of developing watershed parks that provide water quality improvements, the benefit to DACs and the region is creating additional open space and recreational opportunities. The parks in Lynwood and Compton demonstrate how multi-benefit projects can meet IRWM plan requirements and address the needs of disadvantaged communities.

Planning projects is key; however, we seek to go a step further with this evaluation by identifying strategies that work to engage disadvantaged communities. We hope our recommendations are transferable to other planning processes in urban DACs. Intentionally including disadvantaged communities in planning may lead to a more equitable distribution of the State's resources and a redressing of environmental injustices.

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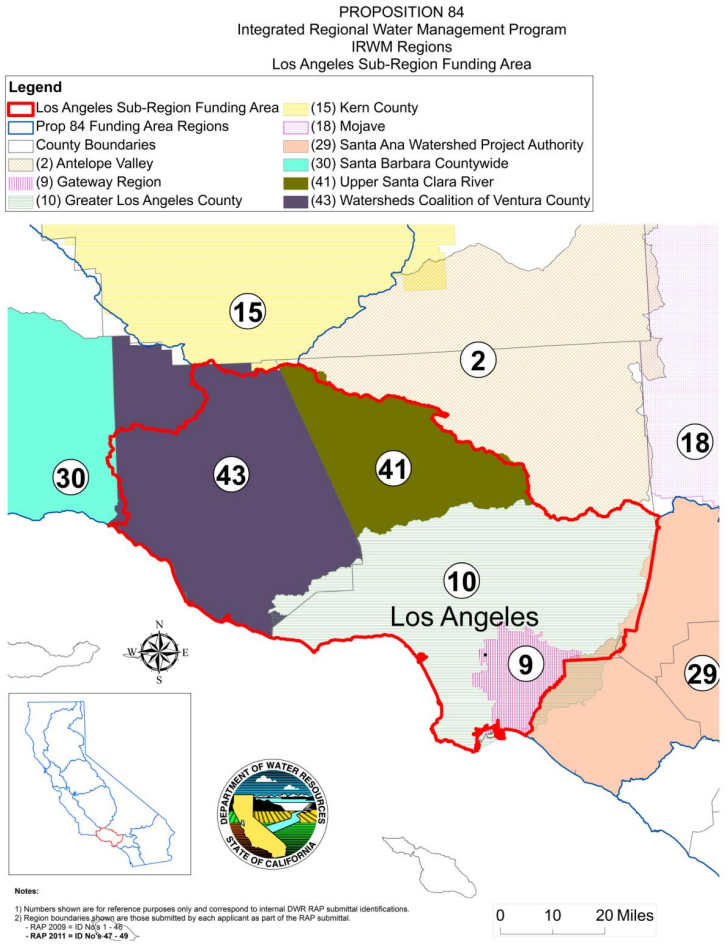
Chapter 1

Introduction

In November 2006 voters approved Proposition 84, which included $1 billion for the development of Integrated Regional Water Management Plans throughout California (DWR, 2010). The Department of Water Resources (DWR) allocated $215 million for IRWM plans in the Los Angeles funding area. Water management and other agencies worked together to form IRWM regions, such as The Greater Los Angeles County (Greater LA) region and the Gateway Water Management Authority (Gateway region) to compete for funding designated for this area. The San Gabriel & Lower Los Angeles Rivers and Mountains Conservancy (RMC) holds a seat on the Leadership Committee of the Greater LA region. The mission of the RMC is to "preserve open space and habitat in order to provide for low-income recreation and educational uses, wildlife habitat restoration and protection, and watershed improvements within [their] jurisdiction" (RMC, n.d.). The agency's territory extends from the San Gabriel Mountains and eastern Los Angeles County to western Orange County (RMC, n.d.). The RMC has been actively working to increase participation of DACs in the planning process through the Disadvantaged Communities Committee of the Greater LA region. Funding Alcanza to undertake these planning projects in South Los Angeles illustrates RMC's commitment to increasing the amount of funding reaching low-income communities.

The goal of the Alcanza pilot was to engage DACs in planning a project that would address their water-related needs[3]. In each city, Alcanza hired a community-based non-profit organization to conduct outreach and engage residents in planning a project. From 2011-2012, the Alcanza team worked with From Lot to Spot in the City of Lynwood and Compton Jr. Posse in the City of Compton to host a series of planning



Source: Department of Water Resources

3. The term "water-related need" is used in this report to refer to a water quality or water supply issue.

workshops in each community. The Alcanza team, Miriam Torres and Miguel Luna, managed the planning process and coordinated a technical support team that included a landscape architect and several engineers. The Alcanza team and community-based organizations worked with community members to envision, design, and plan the multi-benefit watershed parks. The outreach and project planning process concluded in September 2012. Alcanza developed and submitted the projects to compete for Proposition 84 IRWM Plan funding in collaboration with the respective cities. We submitted the City of Compton project, Alondra Regional Park, for funding to the Greater LA region. We developed the application for the City of Lynwood's project - Lynwood Water Improvement Park - to compete in the Gateway region's process.

The goal of our evaluation is to understand how DACs can effectively engage in resource management and planning processes. The Alcanza pilot implemented a planning model in two communities, which we refer to as case studies. We begin our evaluation of these case studies by reviewing the literature to objectively define effective engagement of DACs. We distinguish public participation from engagement and define an effective process using principles found in the literature. We use these principles of effective engagement to assess the planning process in the Alcanza case studies. We analyze the results of the evaluation to gain greater understanding of the community members' experience and develop recommendations. These recommendations may be transferable and useful in future engagement processes with DACs.

Disadvantaged Community (DAC) and DAC Projects

The State expects IRWM regions across California to address the water quality and water supply needs of DACs by engaging them in the planning process. The Department of Water Resources defines a disadvantaged community as a "community with an annual median household income that is less than 80 percent of the statewide annual median household income (PRC§ 7500(g))" (as cited in DWR, 2010). This DAC definition has been subject to criticism by various entities, which argue that a community cannot be identified, solely or accurately, by economic indicators. Since the inception of IRWM, advocacy groups have argued for expanding the definition of DACs to include other indicators such as the number of students on the reduced lunch program in a particular community. An assessment of other demographic or economic parameters that could define a DAC is beyond the scope of this report.

DWR's Proposition 84 guidelines further indicate that IRWM plans should "identif[y] disadvantaged communities in the region and [take] the water-related needs of those communities into consideration (CWC§10530 et seq.)" (as cited in DWR, 2010). In the competitive selection process, a project receives a few more points when it "addresses critical water supply or water quality needs of disadvantaged communities within the region" (DWR, 2010). The definition for critical water supply or water quality needs is likely derived from the Safe Drinking Water State Revolving Fund priority criteria, which refers to the projects' ability to "address the most serious risk to human health" in accordance with section 116760.70 of the Health and Safety Code. The most significant benefit DAC projects receive from this classification is a local funding match waiver, which non-DAC projects are required to meet (DWR, 2010). Otherwise, DAC projects in Los Angeles County would enter the same competitive process as any other project.

DAC participation requirements were chaptered into the California Water Code because DAC representation (including cities, advocates, and non-profits) has been mostly lacking in IRWM planning governance across the State. Local water agencies have not effectively reached out to disadvantaged communities or DAC representatives. Moreover, the technocratic nature of the process requires technical knowledge that disadvantaged community members and representatives generally do not possess. Finally, for DACs to participate in a meaningful way and develop competitive projects, substantial resources are necessary. Various water management agencies involved in the Greater LA region planning process acknowledge that these barriers should be addressed to ensure adequate and effective outreach to DACs.

Despite the approval of AB 626 (Eng), not enough funding has been designated for DAC projects in the Greater LA region's IRWM plan. AB 626 (Eng) attempts to address the water-related needs of DACs by mandating DWR to "[award] grants for those purposes to disadvantaged communities within a hydrologic region in a total dollar amount that is not less than 10 percent of the total dollar amount of grants awarded within the region." (CWC§83002 (c)(i)). During the 2010 selection process of implementation projects, the Department of Water Resources found the region's projects did not address the critical water supply or water quality needs of DACs.

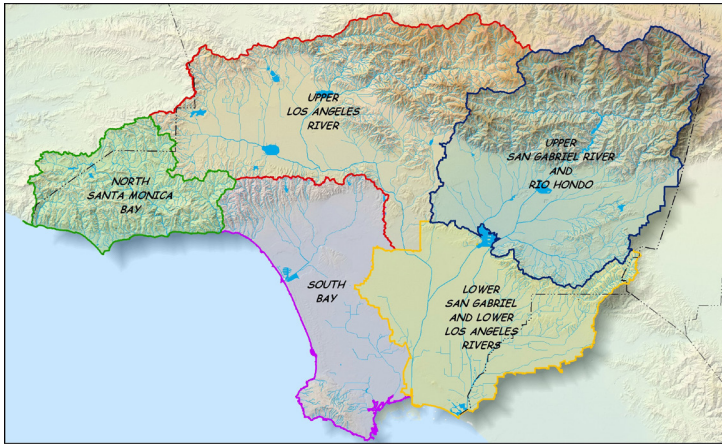
Assembly Bill 626 (Eng) mandates that 10% of IRWM plan funds in each region reach Disadvantaged Communities

The State's current definition of what constitutes a DAC project may be a constraining factor for the region and other urban areas. While there are a number of urban DACs that receive contaminated drinking water, projects in these communities would likely not qualify under the "critical" definition as most water systems in the Southland are under compliance with the Department of Public Health. AB626's 10% allocation is a regional funding requirement but urban DACs may not receive their minimum allocation given the current definition of "critical" water needs. However, the planning process for the projects in Lynwood and Compton was intended to develop multiple benefit projects that meet IRWM plan guidelines while also meeting disadvantaged community needs. The purpose of this evaluation is not to assess if these projects meet the State's DAC definition but rather to identify how agencies can engage disadvantaged communities to develop IRWM-eligible projects.

The Greater Los Angeles County Region: Integrated Regional Water Management Plan

The Greater LA region covers a vast area spanning over 92 cities and represents a population of 10.2 million (LACFCD, 2009). Most major water management agencies in the region participate in this process; some cities and non-profit groups are also actively involved. The plan is divided into 5 sub-regions: Lower San Gabriel and Los Angeles Rivers, Santa Monica Bay, South Bay, Upper Los Angeles River and Upper San Gabriel, and Rio Hondo (LACFCD, 2009). Each sub-region has a Steering Committee, which makes decisions about projects and governance at the sub-regional level. The Steering Committees each have a representative on the Leadership Committee, which makes the ultimate regional decisions. The objective of the Greater LA region is to manage water resources collaboratively to achieve solutions that are mutually beneficial for all entities involved (LACFCD, 2009). In theory, the IRWM planning process enables water agencies to maximize efficiency and monetary resources by integrating their efforts and prioritizing projects on a regional basis (Governance Chart in Appendix A). The Greater LA IRWM has secured over 20 million in funding for planning and project implementation.

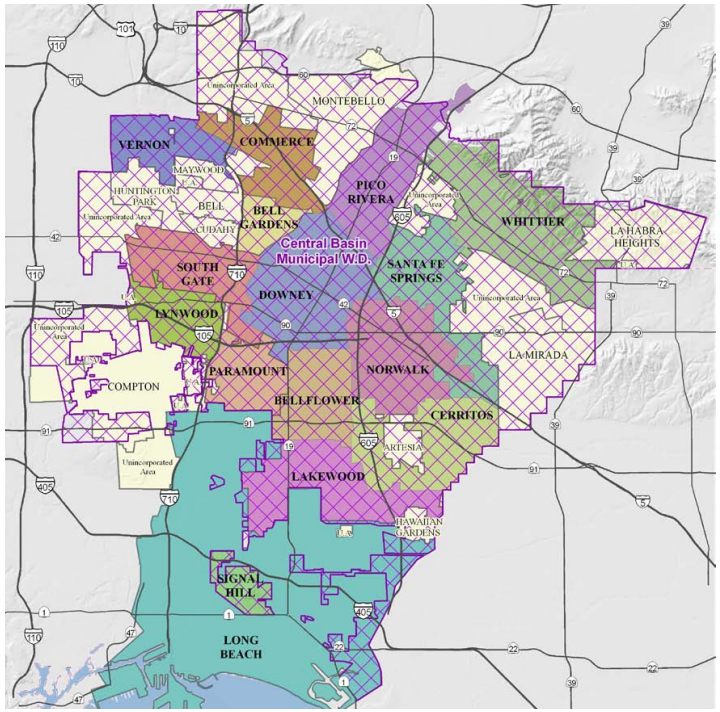
Greater LA Region



Source: Leadership Committee, 2013

The Gateway Water Management Authority (Gateway region)

The Gateway Water Management Authority is another distinct IRWM region covering 26 cities and representing over 2 million people in Southeastern Los Angeles County (Perry, n.d.). The Gateway region originally incorporated as the Gateway Cities Joint Powers Authority in 2007 (Gateway Region, 2010). A Board of Directors comprised of representatives from signatory cities and water agencies shown below govern the Gateway region, a decision-making chart is included in Appendix B (Gateway Region, 2010). The Gateway region formed to address their local water management concerns, particularly groundwater and storm water quality problems (Gateway Region, 2010). The Gateway region has secured nearly $1 million in State funds for IRWM planning and $10 million in federal funding to address trash in the Los Angeles River (Gateway Region, 2010). As shown on page 14, the Gateway region overlaps with the Greater LA region's Lower San Gabriel and Los Angeles Rivers subregion. While not the subject of this paper, we must acknowledge that political tensions exist between the two IRWM planning regions.



Source: Gateway 2010

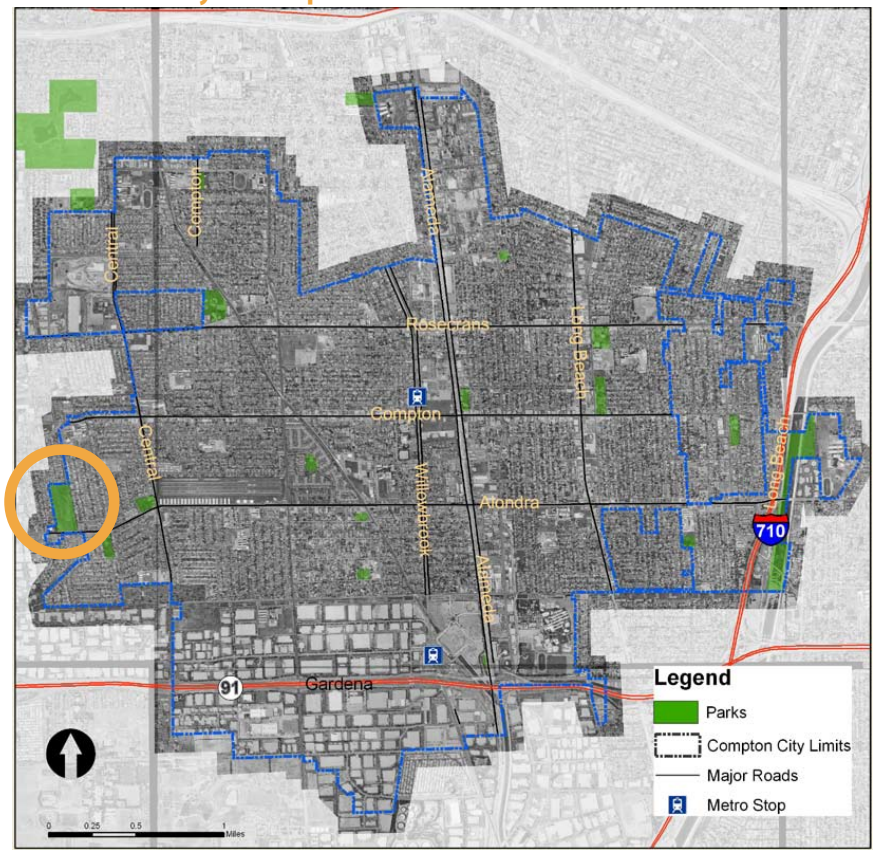
Disadvantaged Communities in the City of Lynwood

The City of Lynwood is a dense community of 69,772 residents living within 4.84 square miles (US Census 2006-2010b). The vast majority of the population is Latino (86%), 10% are African-American, and 3.4% report two or more races (US Census 2006-2010b). Lynwood is a DAC with a median household income of $43,654 or 72% below the State average (US Census 2006-2010b). A map of the City of Lynwood, showing the disadvantaged areas is included in Appendix D. The unemployment rate in Lynwood is 17%, which is more than twice the national rate in 2012 (US Bureau of Labor Statistics 2012). A third of the population is under the age of 18 and according to the Lynwood Unified School District's report, almost 88% of students are eligible for free or reduced lunch ("Compton Unified" 2009). With only 46 acres of open space, the City of Lynwood would need to provide at least 24 additional acres to meet a standard of 10 acres per 1000 residents (General Plan 2020, 2003). Alcanza selected the City of Lynwood given the large sector of DACs, its lack of open space, and proximity to the Los Angeles River.

Disadvantaged Communities in the City of Compton

The City of Compton (Compton) is a 10.2 square mile community in South Los Angeles County. Compton is home to 96,455 residents; 65% are Latino, 33% are African-American, and 3.4% report two or more races (US Census, 2006-2010). Compton is a DAC with a median household income of $43,201 or 71% below the State average, a map of DAC areas is included in Appendix F (US Census, 2006-2010). The unemployment rate in Compton is 18.6%, which is more than twice the national rate in 2012 (US Bureau of Labor Statistics, 2012). Moreover, according to the Compton Unified School District's report, 85% of students are eligible for free or reduced lunch. The City of Compton has 42 acres of developed parkland; the city would need to provide at least an additional 54 acres of open space to meet a standard of 10 acres per 1,000 residents (A Vision for The City of Compton, 2007). As shown on the map, parks are thinly dispersed throughout the city and there are vast areas that have no parks within a half-mile walking distance. Alcanza selected the City of Compton since a large sector of the city's population is a DAC, it lacks open space, and it is located within the Compton Creek, Dominguez Channel, and Los Angeles River watersheds.

Parks in the City of Compton



Source: A Vision for The City of Compton, 2007.

Alondra Regional Park Proposed Site

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Chapter 2

Literature Review

Introduction

The purpose of this evaluation is to address the question: How can agencies effectively engage disadvantaged communities (DACs) in resource management? This chapter explores the literature on stakeholder engagement in resource management and planning, disadvantaged community inclusion and engagement, and case study evaluation.

Public participation is compulsory in numerous local, state, federal planning efforts, including the Integrated Regional Water Management Planning process. Meaningful and successful public participation is assumed to improve process and outcomes. The Department of Water Resources mandates that all IRWM plans "include a public involvement process that outreaches to the public and provides an opportunity for the public to participate in Plan development and implementation" (DWR, 2010). Furthermore, the IRWM agencies have a mandate from the State to create a process that includes disadvantaged communities and ensures equitable distribution of benefits (DWR, 2010). The sheer geographic size and the number of the entities involved, however, complicates the participatory intent of the planning process. Agencies in the IRWM planning process have struggled to figure out how to engage disadvantaged communities. In an effort to inform the evaluation of the Alcanza engagement pilot and create recommendations for the region, this report will provide an overview of this topic in the literature. The following review examines characteristics of effective stakeholder engagement in resource management and planning; a framework to analyze effective engagement of disadvantaged communities; and evaluation models applicable to resource planning processes.

Stakeholder Engagement in Resource Management and Planning

Public participation varies widely depending on the context and type of process. Public participation evokes images of town halls and voting booths, where disparate individuals have the opportunity to cast their opinion. In 1969, Sherry Arnstein developed the time-honored ladder of participation, which defines the various levels of public participation (Arnstein, 1969). The participation ladder features eight levels: 1. Manipulation, 2. Therapy, 3. Informing, 4. Consultation, 5. Placation, 6. Partnership, 7. Delegated Power and 8. Citizen Control (Arnstein, 1969). Effective participation, based on the Arnstein ladder, is at the level of citizen power (levels 6-8), which allows for collaboration and includes the public in decision-making (Arnstein, 1969). Citizen power results in what Patsy Healy would define as an inclusionary process, which "accepts the contributions of all members of a political community and recognizes the range of ways they have of knowing, valuing, and giving meaning" (Healy, 1996). An inclusionary process facilitates the participation of people with different base knowledge and enables people to feel valued through effective flows of information. We use Healy's inclusionary approach to define engagement as the meaningful inclusion of all people in resource management and planning. Therefore, we explore the literature to define an effective resource planning and management process through the lens of inclusionary engagement.

An inclusionary approach has not traditionally been embraced in water and environmental management ("resource management"). Resource management has been historically

a technocratic process, which is inherently undemocratic and leads to inequities (Peattie, 1968). This technocratic process is based on professionals extracting information from participants ("stakeholders") and filtering it through their own lens to inform the planning process (Rydin & Pennington, 2000). For instance, V. Luyet et al., developed a framework for stakeholder involvement based on a review of practices in the field (V. Luyet et al., 2012). The proposed framework involves: 1. "Stakeholder characterization" to understand the level of influence of the participants; 2. "Stakeholder structuring and degree of involvement" where the planner selects a level of involvement for the stakeholder; and 3. "Choice of participatory techniques," which assigns the level of participation that each type of stakeholder will be engaged in (V. Luyet et al., 2012). This model finds all levels of participation on the Arnstein ladder to be appropriate depending on the type of stakeholder. For example, some stakeholders can be assigned to participate through the internet, while others through workshops or interviews. The authors admit that this framework reflects "an expert driven paradigm," which is technocratic and departs from our preferred inclusionary approach (V. Luyet et al., 2012). Since participation techniques are informed by the values that guide the planning process, our focus is now on defining the principles that shape successful resource management and planning processes.

Thomas Webler and Seth Tuler (2001) studied watershed planners and activists in Massachusetts to understand how they define a "good" watershed management planning process. Their findings are particularly instructive as they found these 21 individuals to have varying opinions about what constitutes a good process. Webler and Tuler (2001) conclude that the values people hold inform their expectations for stakeholder participation in water planning. For instance, public involvement may arise from a strong moral belief in democracy or from a preference for a legitimate process. Moreover, they argue that an effort to understand these values should be made when embarking on a planning process (Webler & Tuler, 2001). Although Webler and Tuler (2001) surveyed people in the field, their study was based on a hypothetical situation, which is subjective and may not necessarily elicit the most sincere opinions. However, their study is a step forward in understanding a good planning process. Based on the results of the survey, Webler and Tuler (2001) found the following principles to characterize a good planning process: 1. credible and legitimate, 2. technically competent, 3. democratically fair, and 4. experientially pleasing and efficacious. These principles are included in Table 1 below to illustrate their relation to other principles found in the literature, as explained below.

Empirical studies are of particular interest since they more closely relate to the nature of this evaluation. Kathryn Quick and Martha Feldman (2011) conducted an ethnographic study of various public planning processes in Grand Rapids, Michigan. This study is appropriate for our evaluation because it assesses four different planning processes from an inclusionary framework, which is consistent with our definition of engagement. Moreover, the assessment distinguishes a high level of inclusionary participation from low-level participation from the perspective of the community. From the four case studies evaluated, they found The Master Plan case study to represent a vigorous stakeholder engagement process (Quick & Feldman, 2011). Stakeholders sanctioned the process because it was inclusive and collaborative by including residents

in the visioning process (Quick & Feldman, 2011). Residents had decision-making power and were an integral part of creating solutions to solve the issues at hand (Quick & Feldman, 2011). Agency staff and consultants engaged in a learning process with residents by providing technical support and being open to integrating community knowledge (Quick & Feldman, 2011). The process was open, represented diverse interests, and responded to community needs (Quick & Feldman, 2011).

Quick and Feldman (2011) conclude that an effective planning process is "engaging multiple ways of knowing, co-producing the process and content of decision-making, and sustaining temporal openness". "Engaging multiple ways of knowing" is consistent with Healy's theory of inclusion and promotes learning between community and technical experts (Quick & Feldman, 2011). "The co-production of the process and content of decision-making" refers to collaborative problem-solving, where the community and agency are equal partners (Quick & Feldman, 2011). "Temporal openness" highlights the adaptive and responsive nature of a process that responds to community needs and is open to revisions (Quick & Feldman, 2011). The aforementioned principles of effective engagement are derived from the Master Plan process, which was completed in one year. Quick and Feldman's (2011) study is part of a larger ongoing ethnographic study that documents twelve years of public participation, starting in 1998.

The principles that Quick and Feldman (2011) and Webler and Tuler (2001) propose are complimentary as shown in Table 1. However, for the purpose of this evaluation, we define an effective planning process based on the principles Quick and Feldman (2011) developed. These principles of stakeholder engagement acknowledge community values, incorporate local knowledge, and are more collaborative in nature (Healy, 1996; Rydin & Pennington, 2000).

Table 1. Principles of Engagement for an Effective Resource Management and Planning Process

Engaging Multiple Ways of Knowing (Quick and Feldman, 2011): Dialogue and learning between community experience and technical experts. **Technically competent** (Webler and Tuler, 2001) **Democratically fair** (Webler and Tuler, 2001)	**Co-production of the Process** (Quick and Feldman, 2011): Community has decision-making power, is part of the visioning process, and collaborative problem-solving. **Adaptive and responsive to the will of its participants** (Webler and Tuler, 2001)	**Temporal Openness** (Quick and Feldman, 2011): Process is adaptive and responds to community needs. Project is open to revisions. **Credible and legitimate** (Webler and Tuler, 2001) **Experientially pleasing and efficacious** (Webler and Tuler, 2001)

Source: Torres, 2012

Disadvantaged Community Inclusion and Engagement

The body of literature examining public participation is extensive; however, the literature focusing on disadvantaged community engagement in resource management and planning is scarce. Disadvantaged communities are traditionally disempowered, particularly in planning processes that involve technical knowledge (Peattie, 1968). Disadvantaged community engagement is desirable to avoid perpetuating and exacerbating social inequities (Aboelata, Ersoylu, & Cohen, 2011). DAC engagement is particularly important in "healthy community efforts," which seek to change the built environment as a means to improve the health of individuals. As Aboelata et. al. (2011) note, "successful [engagement] should improve the process and the outcome of healthy community efforts". In this section, we will focus on the characteristics of meaningful and inclusive engagement of disadvantaged communities as defined in the literature.

For the California Department of Water Resources, the definition of "disadvantaged communities" is limited to a low-income demographic[4]. In the literature, low-income communities are identified as minority, underserved, and underrepresented communities. In this report, we refer to the aforementioned communities with the term disadvantaged communities (DAC) to be consistent with the terminology utilized in the Integrated Regional Water Management Planning Process. The specific characteristics of disadvantaged communities in the City of Lynwood and the City of Compton are described in the introduction.

Engagement of disadvantaged communities is highlighted in efforts to improve health outcomes in these communities through changes of the built environment. Aboelata, Ersoylu, and Cohen (2011) catalog strategies to engage communities with the goal of addressing environmental justice concerns and community health, both of which are of interest in IRWM. Successful community engagement "begins with building relationships early in the planning process, providing consistent opportunities for community input, offering ongoing mechanisms for decision making by community participants, and demonstrating tangible ways in which community input influences outcomes" (Aboelata, Ersoylu, & Cohen, 2011). This definition is congruent with Quick and Feldman's (2011) principles of engagement but emphasizes that results should reflect disadvantaged community input. Moreover, Aboelata et al. (2011) propose engaging community members through trusted organizations already established in the community. Organizations are connected to residents that are invested in their community and can harness "quality" participation (Aboelata, Ersoylu, & Cohen, 2011).

While Aboelata et al. propose working through community organizations, Sayce et al., focus on the use of diversified strategies and professional public engagement specialists to engage disadvantaged communities (Sayce, et al., 2012). Sayce et al. (2012) explore the evolution of the California Marine Life Protection Act (MLPA) Initiative in engaging communities. The MLPA Initiative's goal was to engage the public

4. The Department of Water Resources defines a disadvantaged community as a "community with an annual median household income that is less than 80 percent of the Statewide annual median household income (PRC§ 7500(g))"" (as cited in DWR, 2010).

and diverse, disadvantaged communities. The MLPA Initiative first launched in the Central coast and the North central coast with staff coordinating outreach. By 2008, Initiative staff hired an outreach professional for the South coast and North coast planning efforts (Sayce, et al., 2012). The MLPA Initiative's outreach focused on "…building and maintaining relationships, understanding and responding to public needs and concerns, creating formal and informal opportunities for public engagement…" (Sayce, et al., 2012). MLPA staff and outreach specialists made a concerted effort to address linguistic, cultural, and technical barriers to engage underrepresented communities (Sayce, K., et al., 2012). According to Sayce (2012), the dedicated outreach professional enabled the MLPA Initiative to expand and diversify participation in the process. Although the authors noted the best practices that guided their participation process, some approaches were not successful in disadvantaged communities, such as holding meetings during regular business hours (Sayce, et al., 2012). An evaluation of the process has not been conducted, therefore it is unknown if the disadvantaged communities involved supported their approach (Sayce, et al., 2012).

Jeffrey Hou and Michael Rios (2003) examine a successful park planning process in a low-income, diverse community in Oakland. In the early nineties, a community-based group, Unity Council, galvanized the Fruitvale community and a broad spectrum of supporters to establish a 9-acre waterfront park (Hou & Rios, 2003). Based on this case study, Hou and Rios (2003) offer a framework to analyze "community-driven" planning processes. The core framework elements are rooted in social movement theory and include: mobilization structure, political opportunity and cultural framing (Hou & Rios, 2003). The authors use this theory to examine the community-led process, "specifically in terms of how resources and social networks are mobilized, how issues and ideas are developed and framed, and how responses to political opportunities are crafted" (Hou & Rios, 2003). In terms of mobilizing, Unity Council garnered the support of community members and a broad spectrum of allies to develop and build the park (Hou & Rios, 2003). Unity Council embarked on this campaign by first developing a common understanding about local open space issues among diverse community members and professionals (Hou & Rios, 2003). Lastly, in regards to political opportunities, Unity Council strategically involved local and state officials to enlist support and resources necessary to realize the project (Hou & Rios, 2003).

The framework Hou and Rios (2003) developed has elements that overlap with the principles Quick and Feldman (2011) identified for an effective, inclusionary, planning process. While the principles and framework are similar, Hou and Rios (2003) identify specific elements that create an effective approach in this minority, low-income community. Hou and Rios (2003) note that in contrast to traditional participatory planning techniques, the community in Oakland initiated and led the planning process. The distinguishing factor of this process is the principal role Unity Council plays at all steps of the process and how they engage the community in envisioning, designing and acquiring support to materialize the park (Hou & Rios, 2003). The "co-production" aspect of the process is more intentional as there is a deliberate effort to reflect the diversity of Fruitvale (Hou & Rios, 2003). According to Hou and Rios (2003), the planning process Unity Council implemented resulted in meaningful engagement of the Fruitvale com-

munity. The elements of the Hou and Rios (2003) framework that distinguish outreach and engagement of disadvantaged communities are captured in Table 2.

Hou and Rios (2003) argue that a "community-driven" approach offers a promising alternative to the institutional participatory planning process. They argue that this approach builds community capital by increasing understanding and trust among different players, which can result in moving projects to the implementation phase. In this case, the community-driven approach was successful in advancing Union Point Park from an idea, to a community designed project, and finally to an implemented park. A key ingredient to this success was the existing community leadership and capacity to develop the park.

The aforementioned body of literature suggests that direct engagement through a trusted entity is more likely to result in desirable outcomes for the community. There are other similarities in the findings of the authors discussed above, however, the framework Hou and Rios (2003) developed is most appropriate to evaluate the engagement of disadvantaged communities in the Alcanza planning process. Hou and Rios (2003) documented a planning process that has proven effective as the park was fully funded and implemented. Hou and Rios (2003) developed their framework based on a park planning process in a diverse, urban community, which is similar to the Alcanza process that engaged Latino and African-American community members in Lynwood and Compton. Table 2 below includes the framework Hou and Rios (2003) developed, which we use to define effective engagement of disadvantaged communities in resource management and planning.

Table 2. Principles for Effective Engagement of Disadvantaged Communities in Resource Management and Planning

Inclusionary Engagement	**Engaging Multiple Ways of Knowing** (Quick and Feldman, 2011): Dialogue and learning between community experience and technical experts.	**Co-production of the Process** (Quick and Feldman, 2011): Community has decision-making power, is part of the visioning process, and collaborative problem-solving.	**Temporal Openness** (Quick and Feldman, 2011): Process is adaptive and responds to community needs. Project is open to revisions.
Engagement Specific to Disadvantaged Communities	**Discourse** (Hou & Rios, 2003): Culturally-appropriate language, education, and framing of the issue.	**Mobilization** (Hou & Rios, 2003): NGO involves community members. Community members trust NGO, process and engage in planning. Deliberate attempt to reflect diversity.	**Political Crafting** (Hou & Rios, 2003): Forming alliances and support to implement the project.

Source: Torres, 2012

Case Study Evaluation

Evaluation Purpose

Evaluators use systematic methods to gather information, analyze and draw conclusions (Weiss, 2013). The purpose guiding an evaluation varies widely based on the context, evaluator training, and the client, among other elements. Robert Stake, evaluation theorist, offers that the ultimate purpose of an evaluation is to provide a service and improve local practice (Shadish, Cook & Leviton, 1991). Another theorist, J. Bradley Cousins (2013), is concerned with the utility of evaluation; he argues that evaluation meets its purpose when it "support[s] program decision-making". Jennifer Greene (2005) proposes that the purpose of evaluation is to increase our "understanding of the quality and effectiveness of the evaluand[5] in the particular context at hand". Our primary purpose for this evaluation is consistent with Stake and Greene's definition, which is to shed light on the effective aspects of the Alcanza project planning process in engaging disadvantaged communities. The subsidiary purpose is to form recommendations about this approach, which may be transferable and useful in future planning processes.

Strategies

According to Stake, there is no right way to conduct an evaluation (Shadish, Cook & Leviton, 1991). He does, however, advocate for evaluators to employ responsive evaluation techniques. Responsive evaluation is not goal-oriented, instead, it allows methods to emerge from observation and respond to the stakeholders' values and needs (Shadish, Cook & Leviton, 1991). It is responsive evaluation "(1) if it orients more directly to program intents, (2) if it responds to audience requirements for information and (3) if the different value-perspectives of the people at hand are referred to in reporting success and failure of the program" (as cited in Shadish, Cook & Leviton, 1991). Responsive evaluation provides the space for the evaluator to discover the "truths" of the program as experienced by stakeholders. The evaluator synthesizes these "truths" to deliver results that may be useful to stakeholders. Stake's responsive evaluation would be appropriate in diverse communities such Lynwood and Compton although a full implementation of his approach would require more funding and time than is available for this project.

The process that Cousins regularly employs is practical participatory evaluation (P-PE), which is concerned with gaining greater understanding of the workings of the program to inform decisions that seek to improve it. The practical participatory evaluator directly engages a small number of primary stakeholders in the process with the goal of making the evaluation useful (Cousins, 2013). Stakeholders are intimately engaged in "problem formulation, instrument design or selection, data collection, analysis, interpretation, recommendations and reporting" (Cousins & Earl, 1992). By engaging primary stakeholders at every step, the evaluator is increasing their understanding of the project and getting them invested in using the results. Moreover, the evaluator is building stakeholder capacity to use the findings to improve existing and new programs (Cousins & Earl, 1992). Cousins' approach is geared towards making evaluation outcomes useful, which is attractive given our purposes. However, his

5. The project, program or subject under evaluation.

involvement of stakeholders is reserved to the people that hold decision-making power over the project. While we are interested in delivering a useful product, we want to create an inclusive evaluation process that enables community members to voice their opinion about the process.

Green's "value-engaged" approach brings together our preferred evaluation elements: inclusive, responsive, and culturally-appropriate. Under a value-engaged approach, the evaluator commits to "contextuality" and "inclusion" (Greene, 2005). Contextuality means the evaluation design is based on the particular case and evolves as the context takes shape for the evaluator (Greene, 2005). Inclusion encompasses the perspectives of all stakeholders, "with special efforts to include the more marginalized people in the context" (Greene, 2005). Greene advocates for developing the evaluation design after having developed an understanding of the context, connecting with key stakeholders, "identifying priority evaluation questions, and determining criteria for making judgments…"(Greene, 2005). This approach frames the evaluation on the commitment to learning from and engaging diverse participants, which is a key concern for our evaluation.

Greene's value-engaged approach resonates with our intent to create an evaluation that places the experience of community members at the center of our inquiry. The strong commitment of this approach to diversity is also key for our evaluation given the demographics of the participants in the Alcanza case studies. Lastly, since Miriam Torres (author of this evaluation) was the project manager for the Alcanza pilot, she is intimately aware of the context of the evaluand. The following section discusses how our evaluation is formed through a value-engaged approach.

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Chapter 3

Evaluation Methodology

The purpose of this evaluation is to assess the effectiveness of the planning process Alcanza employed to engage disadvantaged communities. According to Greene's approach, the first questions to answer are; "Which issues matter in this context? And what particular form do they take?"(Greene, 2005). We seek to understand how agencies can effectively engage disadvantaged communities (DACs) in resource management. The hypothesis is that an effective model for engaging disadvantaged communities is collaborative and inclusionary. The project planning process is a collaborative effort between agency decision makers, community-based organizations and community members from the visioning phase to the planning of the project. These are some of the assumptions we sought to unravel in our evaluation of the planning process in the City of Compton and the City of Lynwood.

Using a value-engaged approach, we conducted a process evaluation and outcome evaluation, as illustrated in the logic model below (Table 4). Logic models "take a systems approach to communicate the path toward a desired result" (Callahan, et.al., 2012). A "process evaluation" asks how well the process was implemented (Callahan et.al., 2012). In our evaluation, "how well" refers to the collaborative and inclusionary nature of the process through the lens of the principles of engagement for effective DAC engagement as outlined in Chapter 2 (Table 2). As shown in Table 4, the logic model allows us to present the immediate outputs, intermediate outcomes, and long-term impacts that result from Alcanza's planning process.

6. "Logic model" adopted from "Pathways to Environmental Justice: Advancing a Framework for Evaluation" (Callahan et.al., 2012)

Table 4[6]. Logic Model of Alcanza's Engagement Process with DACs in Lynwood and Compton

Inputs	Activities	Outputs	Outcomes	Short-term Impacts	Long-term Impacts
Money, time, financial commitment, and expertise.	Outreach Education Site Identification Technical Support Site Vision and Plan Funding Competition	Two multi-benefit projects are planned with DACs Project applications are developed to compete for IRWMP funding		IRWMP funding reaches disadvantaged communities DAC needs are met and local water-related issues are addressed	DACs engage in local resource management Future water-related needs in DAC communities are met

Process Evaluation

Outcome Evaluation

The "Outcomes" column will summarize how well Alcanza met the principles of engagement based on the "changes in targeted stakeholder's knowledge, attitude, or skills" (Callahan et.al., 2012). While it is too early to conduct an evaluation of the impacts, we include our desired impacts in the logic model to illustrate our long-term vision for processes of this sort.

Instrumentation/Measures

The methodology for this evaluation draws on theories of evaluation, specifically on the value-engaged approach. The evaluation was formed from an analysis of documentary evidence and interviews with an emphasis on the experience of workshop participants. The data review included workshop notes, reports, visual data, and images related to Alcanza's planning process. The aim of the interview and data analysis was to learn if the residents' experience supports the hypothesis. As shown on Table 3, the questions we formulated to evaluate Alcanza's process were derived from the engagement principles found in the literature review.

Data Analysis Plan

Outreach team consultation: Project team member Miguel Luna, and the contracted outreach organizations, From Lot to Spot and Compton Jr. Posse, ("key stakeholders"), were consulted during the development of the evaluation to develop a shared understanding of the planning process. The key stakeholders were asked for input to develop a shared understanding of the outreach and engagement process; this information served as the foundation to develop a descriptive portrayal of the activities involved in the planning process. This shared understanding of the planning process was used to answer the evaluation questions formulated in Table 3 below.

Documentary data review: Alcanza files relevant to community engagement were reviewed, including; workshop sign-in sheets, the outreach plan, outreach fliers, field notes, workshop reports, project funding application, and images. The aim of the review was to answer the questions related to effective engagement of disadvantaged communities (Table 3).

Interviews: We interviewed 12 community members; 5 from the Lynwood workshops and 7 from the Compton workshops. Six community members were interviewed in-depth for a maximum of one hour and six interviews were shorter (10-15 minutes). Both the short and long versions included closed-ended and open-ended questions. In Lynwood, we interviewed three males and two females, who self-identified as African-American (1), and Latino (4). In Compton, we interviewed three males and four females of whom three are African-American, two are Latino, one Caucasian and one did not disclose her race. The interviewers were UCLA undergraduate student researchers with experience interacting with diverse communities. The UCLA students were not involved in the Alcanza planning process. If the interviewee's preferred language was Spanish, the interviewer conducted the interview in Spanish. The interviewer asked the questions outlined in Appendix C to gain a greater understanding about interviewee experiences in the planning process.

Table 3. Assessment Questions Based on Principles of Engagement	
	Inclusionary Engagement
Engaging Multiple Ways of Knowing (Quick and Feldman, 2011):	Did the process encourage dialogue and learning between the community members' experience and technical experts?
Co-production of the Process (Quick and Feldman, 2011):	Was the community part of the visioning process? Were community members involved in decision-making? Who was involved in problem-solving? Was the process collaborative?
Temporal Openness (Quick and Feldman, 2011):	Is the process adaptive? Does the process respond to community needs? Is the project open to revisions?
	Specific to Disadvantaged Communities
Discourse (Hou & Rios, 2003):	Was the process culturally-appropriate in delivering information and engaging participants? Was the information accessible? Was it presented in the language spoken by the community? Was there an education process to create a knowledge baseline? Were issues framed in ways that participants could understand? Did community members engage by providing their ideas?
Mobilization (Hou & Rios, 2003):	Were community members involved through a community-based organization (CBO)? Did the community trust the CBO? What role did the CBO play in engaging the community in the planning process? Did the planners reflect the diversity of the community?
Political Crafting (Hou & Rios, 2003):	What is the process to obtain funds to build the project? Was there a process to implement the project? Who was involved in this process? What role did the CBO play in involving the community to obtain funds for the project? Will the community continue to be involved in future efforts to update the design of the project and build it?

Participants: The majority of community residents that engaged in the planning process attended four consecutive workshops. The attendee sign-in sheets have 20 community members for the City of Lynwood and 60 for the City of Compton. Although we would have liked to include community members in the shaping of the evaluation, it was not financially feasible. The RMC grant, which funded the planning process, did not cover the evaluation in its current form.

Procedures: The interviewer conducted phone-call interviews of participants in each of the two case studies, Compton and Lynwood. On the first call, the interviewer first asked if the community member was available for an interview. If the resident was not available, the interviewer attempted to re-schedule an appointment for an interview later in the week. When the community member could not be reached, the interviewer followed-up with a few more calls. The interview included closed and open-ended questions to engage community members in conversation about their experience and interpretation of the planning process as shown in Appendix C. The anonymous conversations were recorded, and all responses were transcribed. All interviews were analyzed to shed light on the community's experience of the process.

Analysis of Outcomes: The main purpose of the evaluation is to capture the participants' experience; however, the outcomes of the process are also captured and analyzed. We describe the competition process for each plan, the outcomes and implications for the future of these projects.

Internal and External Validity

We hope this evaluation provides results that are transferable and useful to other community engagement efforts; however, we do not claim the results are generalizable. As a result, the evaluation of the Alcanza planning process was mainly concerned with the following issues of internal validity: selection, instrumentation, and resentful demoralization.

Internal validity may have been an issue with the selection of interviewees since participation factors differed significantly in each community. For instance, the number of community members that participated in Lynwood was one-third the number of Compton participants. While many participants attended the entire series of four workshops, there were some that did not attend all. We addressed the issue of workshop attendance by ensuring that all interviewees attended two or more workshops. Since the evaluation focuses on one engagement model, which is implemented in two distinct communities, the issue of unbalanced number of participants may be irrelevant. Moreover, triangulation occurs organically as we draw on diverse perspectives and experiences from the two separate case studies (Shadish, Cook & Leviton, 1991).

Another potential issue to internal validity is instrumentation and insider bias since the principal evaluator, Miriam Torres, implemented the case studies as the project manager. We address the issue of insider bias by developing objective evaluation criteria derived from the literature. Moreover, as previously outlined, the outreach contractors were consulted to form a shared understanding of the process. Instrumentation refers to the "instrument" utilized to document changes (in

this case human observers) which may lead to the misinterpretation of results. The interviewers are both young Latina women and this may have impacted the response of the interviewees. The Latino interviewees may feel more comfortable and compelled to provide a frank assessment of the process, particularly if the interview is conducted in Spanish. The African-American interviewees may not have felt as comfortable with the interviewer and it may have impacted their level of engagement with the questions. However, the interviewers were impartial and brought objectivity to the interviews as they were not involved in the planning process. Moreover, the interviews were anonymous to provide a safe space for community members to share their experience.

Lastly, resentful demoralization may have created an issue of internal validity with the Compton interviewees as the park was not selected in the funding competition. Assuming community members were aware of this information prior to the interview, it may have caused them to focus on the outcome rather than the process. We addressed this challenge by focusing our interview questions (Appendix C) on the planning process.

Conclusion

Traditionally, evaluations determine if a funded activity achieves the goals it set out to meet. This evaluation assesses Alcanza's success in meeting the stated goals with a focus on how well the process engaged disadvantaged communities. The analysis begins with a description of the Alcanza engagement model and implementation in each of the cities. We compare the engagement model to the engagement principles and questions. More importantly, we interview community members to gain a greater understanding of their experience. Lastly, the report concludes with a set of recommendations for future engagement of disadvantaged communities in the IRWM planning process.

Chapter 4

Alcanza Planning Process and Analysis

Introduction

Alcanza embarked on this planning process with the main goals of creating multi-benefit projects in collaboration with disadvantaged communities and increasing awareness about IRWM plans (Torres, 2011). Alcanza's aim to plan projects that provide multiple benefits such as ecosystem services and recreation is a response to the lack of open space in South and Eastern Los Angeles (Torres, 2011). Moreover, it attempts to address the paucity of multi-benefit and disadvantaged community projects in the IRWM plan (Torres, 2011). A cornerstone of the process was to utilize current scientific knowledge to develop multi-benefit projects that would provide local water benefits. Alcanza launched a planning approach based on three interdependent elements: community, technical assistance, and agency sponsorship (Torres, 2011). Alcanza's process places residents at the center of the planning effort to develop projects that meet the needs of the community (Torres, 2011). Since the planning process is specifically designed to develop an application for IRWM funding, technical assistance was a priority from the onset. Lastly, to ensure the project is implemented and viable over the long run, it was prudent to have a governmental agency sponsor.

Alcanza's first step was to contract a non-profit organization rooted in the target community to conduct the outreach (Torres, 2011a). This approach makes the community the protagonist since the visioning process begins when the community comes together. This approach assumes that contracting a community-based organization results in greater stewardship for the project over the long run (Torres, 2011). Contracting a non-profit organization to conduct outreach is one way to meaningfully engage disadvantaged communities in this water and resource management process.

Non-profit organizations are eligible to compete for IRWM funds; however, Alcanza opted to seek agency sponsorship of the project. In this case, agency sponsorship is preferable as agencies are in the business of developing public resources. Moreover, agencies have the capital, resources, and relationships to finance large projects. Finally, this was an effort to establish a relationship between the agency, community organization, and residents (Torres, 2011).

Alcanza's approach recognizes that disadvantaged communities lack the fundamental financial and technical resources to create IRWM-eligible projects. Our approach remedies this concern by providing technical support throughout the process. Our technical team - the landscape architect and hydrologists - were instrumental at all facets, including the preparation of a competitive IRWM plan application. The planning process consisted of four community workshops to select, design, and plan one site in each city. The four consecutive workshops allowed sufficient time to gather technical information and update the designs between meetings with the community. Our goal was to provide a meaningful experience for the community and this was the best way to achieve it given our budget and time constraints.

This section details the planning process implemented in each city. In the section that follows, we will analyze key aspects of the planning process against the principles of effective DAC engagement in resource planning and management.

Planning Process in the City of Lynwood

In the City of Lynwood, Alcanza subcontracted From Lot to Spot (FLTS) to outreach to community members in the city. FTLS is a non-profit organization dedicated to "improving blighted, urban neighborhoods in the greater Los Angeles area one vacant space at a time, by creating much needed, community-designed green spaces"(Franco, 2011). Alcanza selected FTLS to conduct outreach in Lynwood given its environmental expertise and experience working with community members in South East LA (Torres, 2012). We hosted four workshops at 11329 Ernestine Ave in Lynwood on 2/23, 3/3, 3/8 and 3/13 (Torres, 2012a). FTLS recruited twenty Lynwood residents, a City Councilmember, and representatives from the City's Community Development Department to attend our workshop series (Torres, 2013a).

At the first workshop, Alcanza introduced community members to the IRWM program, as well as key water and environmental concepts (Torres, 2012a). Following the educational component, community members provided their ideas about potential sites for the project (Torres, 2012a). FLTS also worked with the City of Lynwood to identify potential sites for the DAC multi-benefit project. The community voted on a list of potential sites, which included sites provided by the City, other entities and the community (Torres, 2012a). Community members narrowed the list to five sites based on an array of factors, including safety, visibility, open space, and water-related needs. The project hydrologist from Geosyntec evaluated the potential water-related benefits of the five community-preferred sites. The site with the highest Geosyntec score is also the site that received the greatest votes of confidence from community members (Torres, 2012a). Prior to the hydrology modeling, community members noted recurring flooding issues at the site with the highest Geosyntec score [Geosyntec assessment summary in Appendix D-2] (Torres, 2012a). The selected site is 6.5 acres located on a long stretch along Fernwood Ave., between Atlantic Ave. and Long Beach Blvd, map included in Appendix D (Torres, 2012a).

The City of Lynwood recently acquired the site on Fernwood and began seeking support to develop it into a park. However, the city did not previously consider water management elements as part of the park design, nor the potential to seek IRWM plan funds (V. Franco, personal communication, February 2012). The city was in favor of having residents update the existing basic park design to reflect the community's need to address local flooding issues and seek IRWM funding. Alcanza and the project design firm, GDML, launched the design process with a discussion about potential water benefits for the site. The community worked with the landscape architect to include elements they wanted in the design and those that would resolve the flooding issues they identified. The City of Lynwood participated in the Alcanza workshops and supported the community planning effort.

We concluded the workshop series in the Spring of 2012 with a park the community designed to address historical flooding issues and meet their recreational needs. The city agreed to serve as the project sponsor and authorized Alcanza to submit an application to the Gateway region. Alcanza developed the application for Fernwood Water Improvement Park and submitted it to the Gateway region on September 5th 2012 (Torres, 2012d). Conceptual plans for Fernwood are included in Appendix E. The IRWM funding requested for Fernwood Water Improvement Park was for $3,877,066 (Torres, 2012d). On February 14th, 2013, it was selected by the Gateway region's Board of Directors. The Gateway region approved Fernwood Water Improvement Park to be included in the regional application for IRWM funding to the Department of Water Resources.

Planning Process in the City of Compton

The planning process in Compton was similar to the process Alcanza implemented in Lynwood. In the City of Compton we contracted a local non-profit organization, Compton Jr. Posse, to reach out to community members. The organization has served the area since 1988, providing access to educational, recreational, and life-changing opportunities (Akbar, 2012). Compton Jr. Posse was ideal for this project given their history working in the community and commitment to improving the lives of Compton residents. Compton Jr. Posse recruited over 60 attendees over the course of the planning workshops (Torres, 2013).

In preparation for the workshop series, Alcanza convened four meetings and several educational tours with the outreach team. The Compton Jr. Posse outreach team expressed a need to increase its own capacity on water, open space, and IRWM concepts to effectively engage community members. Following the conclusion of this pre-training, we hosted the workshop series in the summer of 2012, which occurred on 6/14, 6/22, 6/28 and 7/2 at the Compton Jr. Posse headquarters.

Similarly to the process in Lynwood, we started by introducing community members to IRWM, water, and land-use basics (Torres, 2012e). We worked with Compton Jr. Posse, residents, and other organizations working in the area to identify ten potential sites for the multi-benefit project (Torres, 2012e). Community members ranked the proposed ten sites based on water benefits, recreational opportunities, safety, visibility, and other considerations (Torres, 2012f). The project hydrologist, Geosyntec, evaluated seven community ranked sites for potential water-related benefits (Geosyntec, 2012). Residents ultimately selected the site with the highest Geosyntec score and the greatest potential to serve their open space and water-related needs [Geosyntec assessment summary in Appendix H]. The selected site is 18 acres located at 2801 Alondra Bl. and it is owned by the City of Compton, map in Appendix F.

Once the community selected a site, we worked with Compton Jr. Posse to identify a project sponsor. Since the owner of the site is the City of Compton's Successor Agency, Alcanza and Compton Jr. Posse met with city representatives to seek their sponsorship. We learned from the City that the community's preferred site was already zoned to become a park, however, the development of this project was on hold (Torres, 2012e). Moreover, the city's design of Alondra Regional Park did not include water management benefits. The city appreciated our proposal to revisit the park's design with the community and develop an application for IRWMP funding.

The community assessed the existing Alondra Regional Park design against the objectives of the Greater LA region's IRWM plan. The community identified new design elements to increase water benefits and make this project competitive for IRWM funding. The project design firm, GDML, captured the community's input, integrating it into the existing design. The city accepted the community's proposed changes to the existing Alondra Regional Park design and authorized Alcanza to submit an application for IRWMP funding.

On August 31, 2012, Alcanza submitted an application for 12 acres of Alondra Regional Park to the Greater Los Angeles region (Torres, 2012c). The IRWMP funding request submitted for Alondra Regional Park was for $4,110,000 (Torres, 2012c). A conceptual plan for the site is included in Appendix I. By October 31, 2012, Alondra Regional Park was one of five projects selected by the South Bay Steering Committee to advance to the regional competition (M. Antwine, personal communication, October 31, 2012). Unfortunately, the Leadership Committee did not select the project for inclusion in the region's application to the State competition (Kennedy, M., personal communication, November 30, 2012). Although the park was not selected this year, it is now included in the Greater LA region's IRWM plan and could be considered for funding in the future.

Planning Process Analysis

This section evaluates the outreach and planning process Alcanza implemented with disadvantaged communities in the City of Compton and the City of Lynwood. We begin with the question: How can agencies effectively engage disadvantaged communities (DACs) in resource management? We are evaluating the Alcanza planning process to glean the most relevant lessons that shape an effective planning process in disadvantaged communities. In the following section, we

Table 2. Principles for Effective Engagement of Disadvantaged Communities in Resource Management and Planning

Inclusionary Engagement	**Engaging Multiple Ways of Knowing** (Quick and Feldman, 2011): Dialogue and learning between community experience and technical experts.	**Co-production of the Process** (Quick and Feldman, 2011): Community has decision-making power, is part of the visioning process, and collaborative problem-solving.	**Temporal Openness** (Quick and Feldman, 2011): Process is adaptive and responds to community needs. Project is open to revisions.
Engagement Specific to Disadvantaged Communities	**Discourse** (Hou & Rios, 2003): Culturally-appropriate language, education, and framing of the issue.	**Mobilization** (Hou & Rios, 2003): NGO involves community members. Community members trust NGO, process and engage in planning. Deliberate attempt to reflect diversity.	**Political Crafting** (Hou & Rios, 2003): Forming alliances and support to implement the project.

Source: Torres, 2012

evaluate the two case studies against the principles found in the literature. These principles are: engaging multiple ways of knowing, co-production of the process, temporal openness, discourse building, mobilization, and political crafting, explained in Table 2.

Community Outreach

In each case, Alcanza contracted the outreach to a community based, non-profit organization. Alcanza selected Compton Jr. Posse and From Lot to Spot through a competitive bidding process (Torres, 2012). The groups' advantage was in functioning as a non-profit organization, having an established reputation in the community and significant history working on environmental projects (Torres, 2012). The approach of having a non-profit, community-based group engage the community meets the mobilization principle. In theory, community members would be compelled to engage and trust the process given their connection to the non-profit. In Lynwood, a dozen members regularly attended the workshop series, which is a measure of their willingness to engage (Torres, 2013a). In Compton, 15 people attended regularly and an additional 45 joined at different times (Torres, 2013). While those that attended regularly were better able to plug into the process, even those that were only there for one workshop had the opportunity to provide input.

A community's trust of the process and measure of their true engagement is best measured by their own assessment of the process. To this end, we asked community members what role the non-profit played in getting them involved in the process. The answer in most cases, from Lynwood and Compton

Compton Jr. Posse was "very influential...their credibility and leadership made this much more viable."
African-American male from Compton

interviewees, is that they attended because the non-profit invited them to the workshops. An African-American male from Compton answered referring to Compton Jr. Posse, "They were very influential…their credibility and leadership made this much more viable." (personal communication, March 2013). We also asked community members if they would engage again in a similar planning process and they responded affirmatively. A female Latina in her thirties from Lynwood stated, "Yes, because they have good ideas and they care about the community and the people." (personal communication, March 2013). The interviewees confirm our finding that the outreach met the mobilization principle; people engaged because the non-profit organization working in the community provided credibility to the process.

Education

Once the non-profit organizations were on board, Alcanza launched the planning process with a basic water education presentation (Torres, 2012a). This presentation was not intended to elevate technical, bureaucratic water terminology; rather the goal was to start everyone from the same base to engage in a conversation. Alcanza provided a broad overview of the hydrology cycle and how water moves in and out of the community. We discussed ways that tributaries and rivers are impacted by urban activity. We also reviewed the importance of their groundwater aquifers and how these can be recharged. This presentation led to a conversation with community members to understand how they perceive their water problems and assets. The goal was to gain a deeper understanding of how an open space project addresses the water related needs the community would identify (Torres, 2012a).

The entire workshop series was conducted with simultaneous Spanish translation in Lynwood. Spanish translation was not necessary in Compton.

The educational component meets the discourse building principle of providing language and culturally appropriate education. However, what we may perceive as "appropriate" is subject to interpretation and we asked community members to share their perspective on this factor. We asked community members to rate their level of satisfaction with the information presented during the workshops and the majority responded 9.8 on a 1-10 scale. We also asked community members to relate what they learned during the process. A Latina female in her thirties from Lynwood stated, "they taught us how the design of the park tries to contribute to the way the water was going to be collected …so that the water could not flood our streets and… be used for habitat and stuff like that. That was pretty cool." (personal communication, March 2013). In Compton, an African-American female "learned how water…can be used or recycled…"(personal communication, March 2013). In Lynwood and Compton most of the interviewees recalled the same information; how water, which was previously a nuisance, can turn into a community asset. Other information community members recalled was:

- how water can be captured and collected
- the importance of water tables

9.8 out of 10 was the average level of satisfaction with the information presented during the workshops.

- how to create habitat
- the benefits of environmental stewardship
- how funding is available for projects

Therefore, Alcanza was effective at building an appropriate discourse with the community that enabled them to capture the information presented.

Site Identification and Technical Support

The educational component of the workshops set the stage for a discussion about the community's needs and the selection of a site for the project (Torres, 2012a). Alcanza's goal was to engage community members from the very beginning of the planning process, which also includes the site selection phase (Torres, 2011a). However, given the time constraints, we worked with the non-profit organization to produce a preliminary list of potential sites. Although we came to the workshops with a preliminary list of sites, we also requested that community members identify sites they wanted to add to the list for consideration. All sites were reviewed with residents for their potential to benefit the entire community and to address the water problems they identified. Each community member in attendance was asked to select the three sites they preferred and also to identify those they absolutely did not want to see developed (Torres, 2012a). In each case, the winning and losing sites were clear. When we asked community members to identify the reasons for their selection, the winners were based on their water, open space, and visibility opportunities. The overwhelming concerns for the unwanted sites were visibility and safety. In one instance, community members noted that the location of a site was not visible from any major road and difficult to access (Torres, 2012f). Community members narrowed down the list of sites for hydrological modeling.

The prioritized list of sites was sent to a hydrologist to identify which sites would meet the water quality, water supply, and habitat objectives of the IRWM plan. The site modeling

matrices for each community are included as an appendix (Lynwood-Appendix D-2; Compton- Appendix H). The modeling matrix was discussed with the community and compared to their assessment and ranking. In the case of Lynwood, the community's preferred site was also the highest ranked Geosyntec site. In the case of Compton, the site with the highest Geosyntec score was added late and it was not part of the community ranked list. In both cases, the community voted to move forward to the park design process with the site that would provide the highest water benefits.

The site selection process meets the eng*aging multiple ways of knowing* and *co-production of the process principles*. By ensuring people have the opportunity to voice their preferences regarding a site, Alcanza encouraged community members to share their local knowledge and ideas, therefore *engaging multiple ways of knowing*. Community members also had the opportunity to learn from technical experts when the hydrological matrices were presented. Moreover, community members were empowered through the site voting process, which meets the *co-production of the process principle*. The voting process served the dual purpose of narrowing down the number of sites and revealing the community's preferred site.

To confirm if people were genuinely satisfied with their ability to influence the planning process and in this case, site selection, we asked them to relate their experience regarding this matter. The interviewees in Lynwood recall community members providing input and voting. Compton residents also remembered providing input, an African-American female in her twenties stated, "*it was done together as a team… identify these locations together so it was really about the community coming together and deciding where…*" (personal communication, March 2013). However, half of the interviewees from Compton did not relate a sense of power; their responses alluded to a greater sense of disempowerment. A Latina female in her fifties stated, "*overall, the community of Compton has very little influence*" (personal communication, March 2013). The sense of disempowerment expressed by this lady was shared by other Latino interviewees. It is possible that one inclusionary planning process may not be enough to change

"it was really about the community coming together and deciding..."

a sense of disempowerment that was previously there. In all, the interviewees confirm that the process meets the principles of *engaging multiple ways of knowing and co-production* since residents know they were an integral part of the site selection and technical discussion.

Site Vision and Plan

In each case, the lion's share of the workshop series was spent designing the multi-benefit project with community members. The design process was an exercise to reveal the community's perspective on their open space needs and preferences and to make a connection between park elements and water benefits. The landscape architect led an interactive design process where community members were able to add their ideas directly onto the blueprints of the sites. The design process included a discussion and negotiation among community members about the various ideas presented. For instance, in Compton, a community member suggested basketball courts, which were drawn into one design. Another community member suggested drawing up a different design with only passive recreation features since active recreation could lead to gang activity at the park. The two competing designs were drawn up by the architect and voted on by community members, the design without the basketball courts prevailed. In each community, residents discussed the various designs and individual park elements, ultimately voting to keep those they preferred. Community members "co-produced" with the guidance of the architect. They were able to solve problems such as the basketball court issue amongst themselves through discussion and voting. Temporal openness refers to the adaptive nature of the process, where designs were drawn up, revisited and revised through community input. Although both parks had pre-existing designs, community members were able to change them to fit the current community needs and to add the elements that would provide water benefits. To confirm whether the process truly met the needs of the community, we asked them to rate their level of satisfaction with the design of the project. In Compton, 10 was the average level of satisfaction with the design

The community's average level of satisfaction with their ability to influence the planning of the park was 9.25 out of 10.

reflecting the ideas of the community and 9.5 with the design meeting the needs of the community. In Lynwood, the average level of satisfaction with the design reflecting the ideas of the community was 8.75 and 8.8 with the design meeting the needs of the community. We also asked people to relate if they felt the park satisfied their community's needs and the interviewees overwhelmingly agreed. When asked how satisfied they were with their ability to influence the planning of the park, the average level of satisfaction was 9.25. The interviewees' response confirms that Alcanza led an inclusive and adaptive planning process that met the co-production and temporal openness principles. Another measure of engagement is a community member's sense of being valued. We asked community members if they felt their ideas were valued or undervalued. All the interviewees in each community, including the monolingual Spanish-speakers, felt valued and most would expand on how their ideas were considered, discussed and taken into account. A Latino male community member from Compton responded in Spanish; "Valued, that's why it was a team effort" (personal communication, March 2013). The response of an African-American male in his seventies from Lynwood was, "They were valued. They would listen to my proposed idea. The idea was also accepted and listened too." (personal communication, March 2013). The interviewees confirm that community members felt valued throughout the planning process.

> ***"They were valued. They would listen to my proposed idea. The idea was also accepted and listened too."***
> *African-American male from Lynwood*

Funding Competition

Alcanza started and ended the workshop series explaining that the project would be submitted to the IRWM plan application process to seek funding for implementation (Torres, 2012a). The application process was a collaborative effort between Alcanza, Geosyntec, GDML, and the respective cities. The application was developed with all the information gathered through the workshops but did not include community members in the process. The non-profit groups were involved in advocacy when the projects were presented for consideration. Alcanza submitted the Lynwood project, Fernwood Water Improvement Park, to the Gateway region competitive process. The Compton project, Alondra Regional Park, was submitted to the Greater LA region's competitive process.

The effort to obtain support and funding for the project through the IRWM applications meets the political crafting principle. Although Hou and Rios (2003) created this principle on the basis of a non-profit mobilizing for support, the Alcanza process fits the definition as the non-profits continued to be involved. Moreover, the application in and of itself was a mobilization for support as all entities involved provided pro-bono support to ensure the application met IRWM technical standards. However, Hou and Rios (2003) illustrated a more participatory process in the Oakland case, where community members were involved in the advocacy aspect of mobilizing support. While Alcanza did not have sufficient funds to implement a more comprehensive mobilization effort, it is important to continue to involve members to ensure they are informed of the efforts being made to realize the project. We asked community members if they knew of any efforts to get funding for the park and the majority in both Lynwood and Compton did not remember or did not know of any efforts. However, when we asked them to rate their level of confidence with the project getting implemented, the average answer on a scale from 1-10 was 9.6 in Lynwood and 9 in Compton. Although people were not thoroughly informed about the efforts made to secure support and funding for the project, they were confident that it could be implemented.

Discussion

The process evaluation discussed in the previous sections demonstrates that Alcanza effectively engaged disadvantaged communities and the opinion of community members confirms this assessment. We utilized the principles of engagement to assess if the activities of the planning process were collaborative and inclusionary. The outcome evaluation captures how well we met those principles and what changes community members experienced through the process. As noted in Chapter 3, a way to visualize the evaluation of Alcanza's engagement process and outcomes is in the following logic model presented in Table 4, which now includes our findings of the outcomes.

Alcanza achieved the goal of planning a multi-benefit project with DACs in the City of Compton and the City of Lynwood. Alcanza also managed to plan parks that successfully met IRWM plan requirements for water quality and other technical parameters. Alondra Regional Park advanced to the Greater LA's regional competition while Fernwood Water Improvement park was the highest ranking project in the Gateway region and was ultimately selected for the regional funding application to DWR. These two parks were planned with more than 80 community members through a collaborative process. The community members interviewed (15%) confirm our assessment that the process was inclusionary.

We asked community members to rate their level of satisfaction with the overall planning process at the beginning of the interview. The average level in Lynwood was 9.2 and the average level in Compton was 8.5. When asked again at

the end of the interview, after having considered the process through a series of questions, the average level of satisfaction increased slightly to 9.6 for Lynwood and 9 for Compton. The participants were highly satisfied with the process and did not express any frustrations.

However, there are aspects of the process that worked more than others. Our recommendations below highlight the engagement aspects we believe are most valuable from these case studies.

At the end of the interview, the average level of satisfaction with the overall planning process was 9.6 for Lynwood and 9 for Compton

Table 4. Logic Model of Alcanza's Engagement Process with DACs in Lynwood and Compton

Inputs	Activities	Outputs	Outcomes	Short-term Impacts	Long-Term Impacts
Money, time, financial commitment, and expertise.	Outreach Education Site Identification Technical Support Site Vision and Plan Funding Competition	Two multi-benefit projects are planned with DACs Project applications are developed to compete for IRWMP funding	Community members: engaged in workshops, learned new information, shared local knowledge, experienced positive interactions with technical providers, worked to select and design the site, and felt confident the projects would be implemented	IRWMP funding reaches disadvantaged communities DAC needs are met and local water-related issues are addressed	DACs engage in local resource management Future water-related needs in DAC communities are met

Process Evaluation

Outcome Evaluation

Chapter 5

Recommendations

Recommendations

Since 2006, the State's Integrated Regional Water Management Planning process has progressively required more participation of diverse interests. The State has identified disadvantaged communities as one of the groups that agencies must include in regional IRWM plans. The goal of this evaluation was to assess the Alcanza process specifically designed to engage DACs in planning water-related projects. Alcanza engaged DACs in the City of Compton and the City of Lynwood, in collaboration with local non-profit groups and the respective city agencies. In each case, residents actively designed a watershed park reflecting their community needs. The City of Compton watershed park plan was submitted to the Greater LA region and the Lynwood watershed park to the Gateway region to compete for funding. This section proposes recommendations for future DAC engagement processes in urban DACs. The following recommendations focus on strategies local water agencies can use to effectively involve DACs in the IRWM planning process.

Inclusionary Engagement

1. Hire a community based, non-profit organization to conduct outreach.
2. Design the project planning process in collaboration with the non-profit group.
3. Create an inclusionary project planning approach that engages community members at the onset of the process.
4. Clarify project planning parameters at every meeting.

Inclusionary Planning

1. Start the project planning process with culturally and linguistically appropriate information to lay the foundation for a productive discussion.
2. Create a (site identification) forum that encourages community members to provide their local knowledge.
3. Devise a culturally sensitive site selection process that enables everyone to participate.
4. Facilitate communication between technical experts and community members to ensure dialogue and understanding occurs.
5. Facilitate inclusion of community ideas into the design of the project.

Co-Accountability and Implementation

1. Continue to involve the contracted non-profit group in other efforts to secure funding for the project.
2. Continue to inform participants of efforts made to realize the project.
3. When funding is acquired and the project design is revisited, involve original participants.

Conclusion

While we rely on a limited sample for our recommendations, it is clear that community members want to be involved in resource management. Community members may be initially apprehensive about engaging in a lengthy process with no definite future. However, if residents can sense that the process is authentically interested in utilizing their input, they are more likely to participate. Building trust with a community is critical to engaging them effectively in any planning process.

The recommendations in this report assume the local agency will sponsor the project and is committed to an inclusionary process. Agencies have data on the hydrological problems of a given community but the people that experience those problems on a regular basis have valuable knowledge to contribute. Including DACs in resource planning enriches the process with granular information that an outsider often cannot capture. Agencies can implement an effective process that meets local IRWM plan objectives and ultimately results in projects benefiting the community.

The competitive IRWM planning process, the State's mechanism to fund water-related projects, is a highly technocratic process. These technical requirements work to prioritize funding but also create barriers for DACs without resources to enter the process. Water problems in DACs may not be resolved in the near future unless agencies make a concerted effort to include DACs in their planning efforts.

Agencies have the opportunity to create multiple benefits such as open space and recreational opportunities while addressing local water quality and supply needs. Moreover, a transparent process increases co-accountability for the project and the community's environmental stewardship. Finally, engagement of disadvantaged communities in resource management and planning results in projects that provide targeted benefits to these communities.

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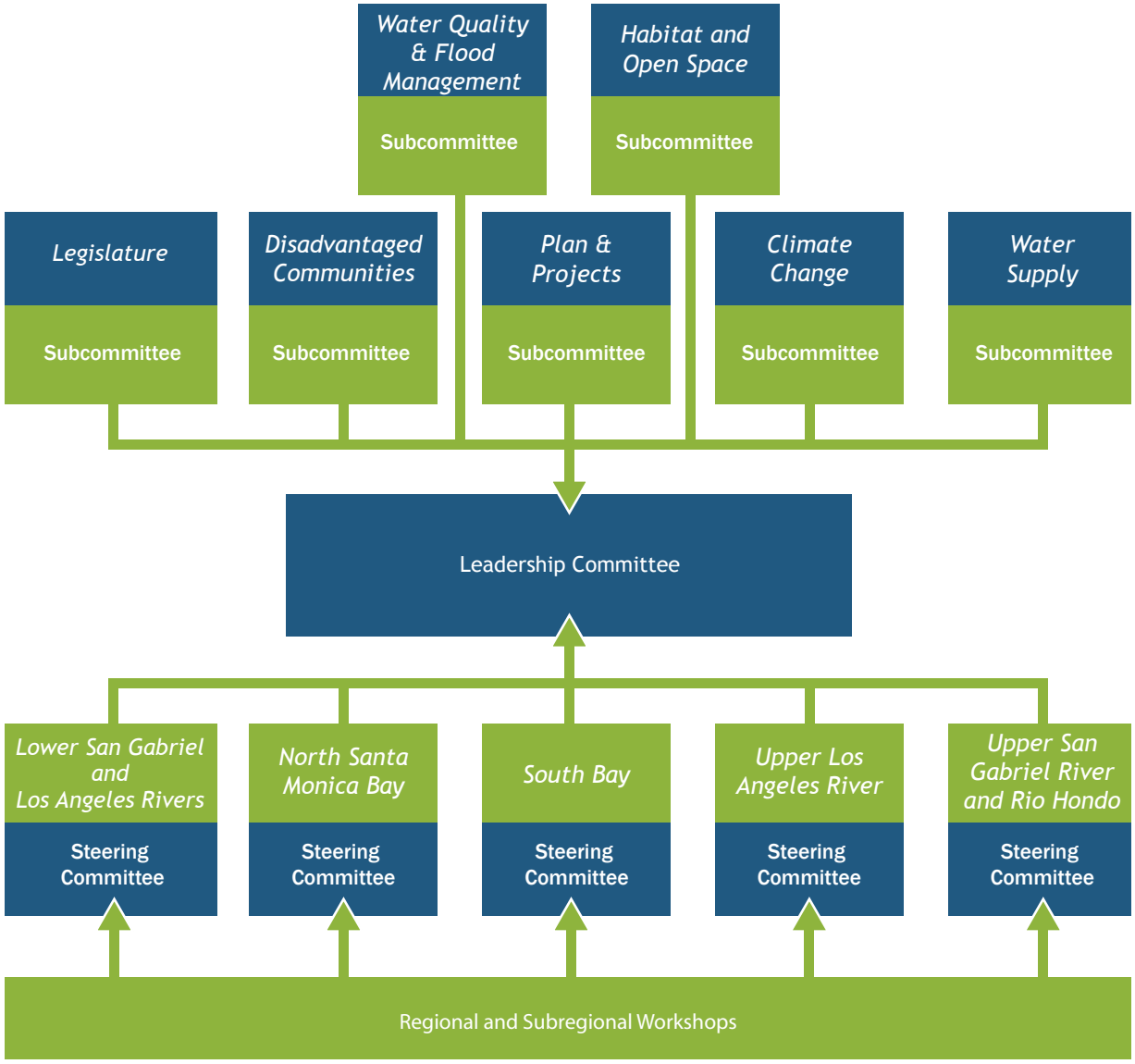
Appendix

Appendix A

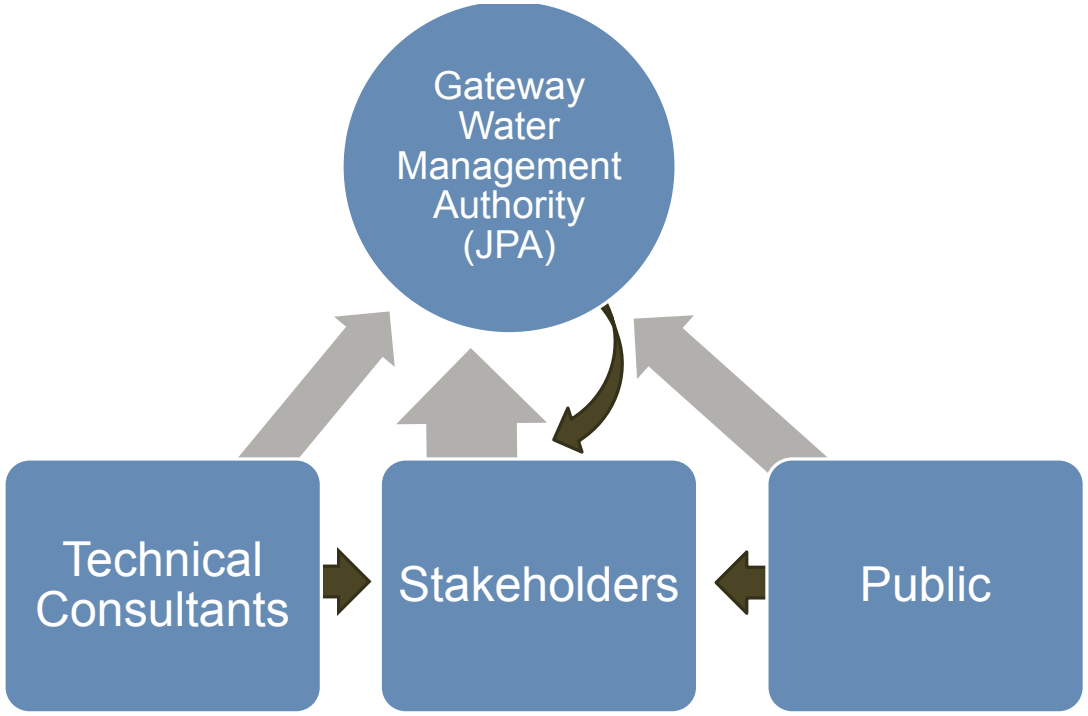
Greater Los Angeles County Region: Integrated Regional Water Management Plan Governance Structure



Leadership Committee, 2013

Appendix B

Gateway Water Management Authority:
IRWM Region Decision-Making



Los Angeles Gateway Region, 2013

Appendix C

Phone Interview Questions
Alcanza Planning Process

	Interviewer's Box
Interview Code	
Community	
Interview Date	
Gender	
Number of workshops attended:	

For the following questions, please respond using a 1 to 10 scale to represent your level of satisfaction.

1 = lowest level of satisfaction and
10 = highest level of satisfaction

1. On a scale from 1 to 10, please rate how satisfied you are with the overall planning process:

2. On a scale from 1 to 10, how satisfied are you with the information presented during the workshops?
    a. Was the information clear?
    b. Was the presenter easy or difficult to follow?

3. On a scale from 1 to 10, how satisfied are you with the design of the park reflecting the ideas of the community?

4. On a scale from 1 to 10, how satisfied are you with the design of the park meeting the needs of the community?

5. On a scale from 1 to 10, how satisfied are you with your ability to influence the planning of the park?

6. On a scale from 1 to 10, what is your level of confidence in the project getting implemented?

Thank you, now we are moving on to a different set of questions.
The following questions are not on a scale, please respond freely.

7. During the park planning process, did you feel your ideas were valued or undervalued?
    a. What would happen when you would propose an idea?
    b. [When others would propose an idea what would happen?]
    c. Why?

8. Please describe any new information you learned through this process.
    a. Did you learn about water?
    b. Or how parks benefit people in your neighborhood?

9. How would you describe the community's ability to influence the planning process from selecting a site to designing the park?
    a. Who made the decision about where the park would be located?
    b. How was the park designed?

10. Does the park reflect the needs of the community? Why or why not?
    a. Is there anything specific in the park design that represents the community needs being met?

11. Do you know if the design of the park can change in the future? Do you think the city would involve you in making future changes?

12. What role would you say [NGO's name] played in getting you involved in this process?
    a. How did they get you involved?

13. Were there frustrating aspects of this process or areas that needed improvement?

14. If [NGO's name] calls you tomorrow to engage in a similar planning process, would you engage? Why or Why not?

15. Do you know if anyone is trying to get funds for the park?

To conclude this portion of the interview, and now that we have discussed the planning process at length, I would like to ask you again:

16. On a scale from 1 to 10, please rate how satisfied you are with the overall planning process:

17. Finally, I would like to ask you a few demographic questions but you do not have to answer, if you are not comfortable. Although these questions are about you, the interview is anonymous.

What is your ethnicity?

- ○ Latino / Hispanic
- ○ African American
- ○ American Indian
- ○ Asian American
- ○ White
- ○ Other: _____

What is the ballpark figure of your annual household income? Does it fall between?

- ○ $0 – $22,350
- ○ $22,350 - $28,643
- ○ $28,643 – $45,829
- ○ Above $45,829*

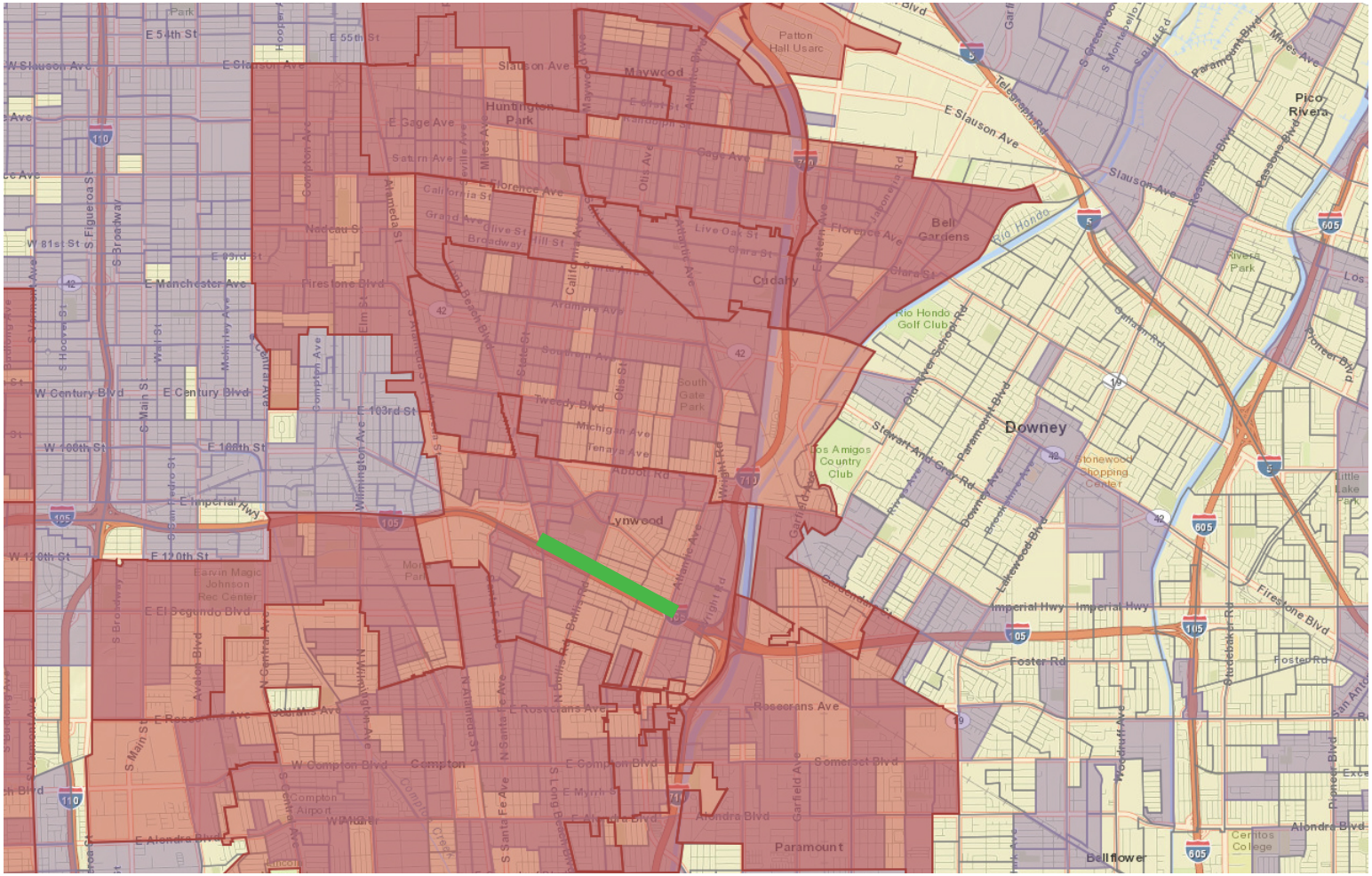
How old are you?

Appendix

Fernwood Water Improvement Park Site
City of Lynwood
Project Information

Appendix D

Disadvantaged Communities in the City of Lynwood



Los Angeles County Disadvantaged Communities. (2012). ARC GIS ESRI. Department of Water Resources

Fernwood Site

Appendix D-1

Fernwood Site Aerial

Photo: Courtesy of Geosyntec

Integrated Regional Water Management Plan

Project Site Identification and Design

Proposed Site:
Fernwood

Owner: City of Lynwood

Location:
Fernwood Ave
between
Long Beach Blvd. and Atlantic Ave.

This planning effort is funded by the Rivers and Mountains Conservancy through the "Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006" ("Proposition 84").

Proposed Improvement Site

Appendix D-2

Geosyntec consultants

3415 S. Sepulveda Blvd., Suite 500
Los Angeles, CA 90034
PH 310.957.6100
www.geosyntec.com

Memorandum

Date: 22 August 2012

To: Miriam Torres, Alcanza

From: Mark Hanna, Ph.D., P.E. and Rita Kampalath, Ph.D., Geosyntec Consultants

Subject: Lynwood Project Prioritization
Alcanza DAC IRWMP Project Evaluation
Geosyntec Project: LA0256

Introduction

In collaboration with members of the Lynwood community in Southern California, Alcanza developed a list of open space projects that may be potential candidates for funding through the California Department of Water Resources Integrated Regional Water Management Plan (IRWMP) process. To assist with the selection of the project most likely to receive funding from IRWMP, Geosyntec developed a matrix by which to evaluate each project using technical criteria based on current priorities of the Greater Los Angeles County (GLAC) IRWM Plan and consistent with the Department of Water Resources IRWMP Guidelines.

The five areas in which projects will be evaluated through the GLAC IRWM process are: 1) water supply, 2) water quality, 3) habitat, 4) recreation, and 5) flood management. Benefits to each of these areas were determined using project concepts and GIS analyses applied to the criteria discussed in detail below.

GLAC IRWMP Criteria

Water Supply Potential

Benefits to water supply were determined using three separate criteria, 1) Groundwater Recharge, 2) Direct-use of captured stormwater, and 3) Water Conservation. The relative groundwater recharge benefits were determined by comparing the location of each proposed project site to potential recharge locations as defined in the Water Replenishment District's "Stormwater Recharge Feasibility and Pilot Project Development Study" (WRD, 2012). Direct-use scores were determined based on the whether the project design and planning involved onsite use of stormwater for irrigation or other non-potable purposes. Water conservation benefits were based on the ability of the project to reduce pre-implementation water use, or minimize post-implementation water demand through landscaping and irrigation design practices.

Water Quality Potential

Water quality targets in the GLAC IRWMP are based on increasing stormwater capture capacity, or equivalent treatment capacity, in the Region. Impacts of the proposed projects on storm water quality were therefore determined based on estimates of the capacity of the completed project to capture, treat or infiltrate stormwater as well as dry weather flows onsite, as well as on the size of the project tributary area, which is the area that drains to the site. Site soil types, which would affect infiltration capacity, as well as proximity to storm drains, such that it would be economically feasible to redirect flows and capture them onsite, were also considered for scoring purposes.

Habitat Potential

Impacts of the proposed project to habitat resources were determined based on several criteria, including the ability of the completed project to provide or enhance habitat for native wildlife populations. In addition, the project location was compared to maps of areas identified as being particularly beneficial for habitat development based on locations of existing or historic wetlands, or, in the case of uplands areas, ideal locations for placement of buffers. Sites that were buffered from development and human disturbance (thereby being more attractive to wildlife) or that could provide linkages to other habitats were scored higher.

Recreation and Greenway Potential

Proposed project benefits to recreation were determined based on the ability of the completed project to serve as a recreational resource to the community by providing urban park space, open space or greenways. The project location was also compared to areas identified as having a high need for additional recreation resources, based on recreation area to population ratios. Sites with high visibility, easy access and adequate space for addition of park space, recreational facilities, or linear green space (in the case of greenways), were also scored higher.

Flood Management Potential

Benefits of the proposed projects to regional flood management were evaluated based on comparison of the project location as well as areas downstream of the project location to areas with unmet drainage needs. Areas with unmet drainage needs consist of flood management resources or areas needing additional flood mitigation measures identified as FEMA Special Flood Hazard Areas (SFHAs). Projects with the ability to reduce flows to areas of high need or to key flood management resources such as waterways used as flood management channels, thereby essentially increasing the flood management capacity of these resources, were determined to have positive impacts on regional flood management.

Table 1. Glossary of Terms

Term	Definition
Greenway Potential	Site would potentially benefit from the construction of a recreational greenway. Higher scoring sites have high visibility, easy access, and sufficient available space for the addition of a linear green space.
Habitat Potential	Site has potential to provide or enhance habitat for native flora and fauna. Higher scoring sites provide connectivity to other habitats and buffered from development and human disturbance.
Pollutant Index	Potential project sites are scored relative to one another with a pollutant weighting factor to prioritize them based on priority pollutants of concern identified within their specific subwatershed, as well as the site's ability to provide adequate treatment.
Recreation Potential	Site would potentially benefit from the construction of a recreational area. Higher scoring sites have high visibility, are located in an area not adjacent to other recreational facilities, allow for easy access, and include sufficient available space for the addition of parks, recreational areas, and recreational facilities.
Stormwater Capture Capacity	The site is able to capture contributing surface flow by capturing and treating and/or infiltrating the stormwater and dry weather flows onsite. High scoring sites have larger tributary areas, relatively good soil types and sufficient space available for infiltration to occur. It is also possible for storm drain flow to be redirected and captured at the site if it is located in close enough proximity to a storm drain to make it economically feasible to do so.
Stormwater Direct Use	Stormwater can be used directly onsite for irrigation or other non-potable purposes.
Stormwater Recharge Potential	The site has potential to recharge natural aquifers through infiltration into the underlying soils. High scoring sites are located in areas that may have direct connections to the underlying potable aquifer, are significant in size, have access to adequate surface water flows, and would not adversely impact groundwater quality.
Unmet Drainage Needs	The site and/or or areas adjacent or downstream of the site are identified as FEMA Special Flood Hazard Areas (SFHAs) and the project has the ability to reduce flows to these areas. Higher scoring sites may be in depressed locations or be located on in-situ soils with low hydraulic conductivity.
Water Conservation	Sites with higher scores have the potential to reduce current water use at the site, and are able to minimize water demand through water-conscious planting and irrigation design practices. Water use onsite would be kept at a minimum.

Evaluation Results

Based on the criteria described above, proposed project sites were given relative scores that were used in conjunction with community input to select a single project from the Lynwood community as a candidate for seeking funding through the IRWM process.

Figure 1. Lynwood Site 3

Based on the technical evaluation described in the previous section, Site 3, shown in Figure 1, was ranked significantly higher than the other sites in the Lynwood community. This high ranking was based on the availability at the site of open space and surface flows for inexpensive stormwater capture potential. It is also located within the Compton Creek watershed, which means that capture and treatment of stormwater flows would contribute to meeting TMDLs and mitigating 303d impairments for both Compton Creek and the Los Angeles River downstream. This site also had the benefit of easy residential access, making it a good location to provide park and recreation area for residents.

The selection matrix for the suite of proposed project sites in Lynwood is included as Attachment 1 to this memo. Maps for each of the proposed project sites were developed to assist in determining each site's strengths and weaknesses and are included as Attachment 2.

References

Water Replenishment District, Council for Watershed Health, Geosyntec Consultants and Santa Monica Bay Restoration Commission, 2012. Stormwater Recharge Feasibility and Pilot Project Development Study.

Geosyntec Consultants, 2012. GLAC IRWMP Surface Water Quality Objectives and Targets, Memorandum, June.

Geosyntec Consultants, 2012. GLAC IRWMP Flood Management Objectives and Targets, Memorandum, August.

RMC Water and Environment, Geosyntec Consultants, 2M, Richard Ambrose, GreenInfo Network, Solution Strategies International and Aubrey Dugger, 2012. The Greater Los Angeles County Open Space for Habitat and Recreation Plan, June.

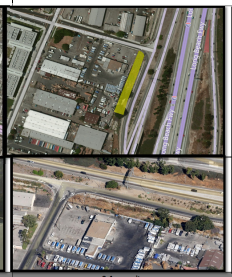
Los Angeles Regional Water Quality Control Board, 1994. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, June.

Attachment 1 – Prioritization Matrix for Lynwood Projects

LYNWOOD DAC PROJECT SITING ALTERNATIVES for the DEPARTMENT OF WATER INTEGRATED REGIONAL WATER MANAGEMENT PLAN

Developed by Geosyntec consultants — engineers | scientists | innovators

Developed for alcanza

				Candidate Sites for the DAC IRWMP Project in Lynwood, California				
				Site 1	Site 2	Site 3	Site 4	Site 5
				Fernwood Ave., between State St. and Beechwood Ave.	Carlin Ave and Alpine Ave	Fernwood Ave., between Atlantic Ave. and Long Beach Blvd.	Martin Luther King Jr. Blvd and Long Beach Fwy	Josephine St. and Atlantic Ave.
								
IRWMP Category	Weight	Subcategory	Subscore	2.4 acre site	0.1 acre site	6.5 acre site	0.4 acre site	0.3 acre site
Water Supply	40	Water Conservation Subscore	10	0.0	0.0	0.0	0.0	0.0
		Stormwater Direct Use Subscore	10	3.7	0.2	10.0	0.6	0.5
		Stormwater Recharge Potential Subscore	20	0.0	0.0	0.0	0.0	0.0
			TOTAL	3.7	0.2	10.0	0.6	0.5
Water Quality	30	Pollutant Index Subscore for Nutrients	5	3.0	3.5	2.5	2.5	2.5
		Pollutant Index Subscore for Metals	10	2.7	3.7	2.0	2.7	2.3
		Stormwater Capture Capacity Subscore	15	5.5	0.2	15.0	0.9	0.9
			TOTAL	11.2	7.4	19.5	6.1	5.7
Habitat	10	Habitat Potential Subscore	10	6.0	2.0	10.0	2.0	2.0
			TOTAL	6.0	2.0	10.0	2.0	2.0
Recreation	10	Potential Recreation Subscore	5	5.0	3.0	5.0	0.0	1.0
		Greenway Potential Subscore	5	5.0	0.0	5.0	0.0	0.0
			TOTAL	10.0	3.0	10.0	0.0	1.0
Flood Mgmt	10	Unmet Drainage Needs Subscore	10	0.0	0.0	0.0	0.0	0.0
			TOTAL	0.0	0.0	0.0	0.0	0.0
FINAL SCORE				31	13	50	9	9
RELATIVE SCORE (OUT OF 10)				6	3	10	2	2
STRENGTHS				High visibility and easy access. Large site acreage.	Ideal location for a pocket park; large surface flow tributary area; no need to tap expensive, deep stormdrain system.	Large surface flow tributary area; no need to tap expensive, deep stormdrain system; potential to tap highway runoff. High visibility and access. Large site acreage.	Treats more highly polluted land use; access to large watershed because of nearby channel.	Has ability to have access to freeway drainage.
WEAKNESSES				Minimal surface flow tributary area; must tap expensive, deep stormdrain system.	2000 ft from groundwater contamination site. Small site acreage.	Potential utility line issues.	Zero access and visibility. Poor location. Small site acreage.	Local recreational needs are minimal. Small site acreage. Small tributary area.
GEOSYNTEC RANKING (incorporating strengths and weaknesses)				2	2	1	4	5
Incorporate as the DAC IRWMP Project?				**no**	**no**	**yes**	**no**	**no**

Appendix D-3

Fernwood Water Improvement Park Project Summary — City of Lynwood

Project Summary

The Fernwood Water Improvement Park site is currently a 6.5-acre lot owned by the City of Lynwood along Fernwood Ave. between Atlantic Ave. and Long Beach Blvd. The site will capture runoff and storm water that primarily drains to the Los Angeles River, which has approved TMDLs for a host of constituents. The project aims to improve stormwater quality to help the region meet requirements under the Municipal Separate Storm Sewer System Permit.

Community Benefits

The site would create recreational opportunities in a disadvantaged community where open space is currently lacking. The project features a public garden, dog park, playground, fitness block and 1-mile long, decomposed granite walking trail for passive recreation. Community members engaged in the planning process identified these elements, which residents across age groups can enjoy.

Water Benefits

- The project is expected to improve water quality. originating from approximately 100 acres of primarily Single Family Residential land use area and water that drains from the 105 Freeway.
- It will enhance the capacity of the Los Angeles River to provide flood protection.
- It is expected to reduce priority pollutants to the LA River and therefore contribute to meeting TMDLs.
- It features 2,500 gallons of capture capacity for direct use.

Habitat Benefits

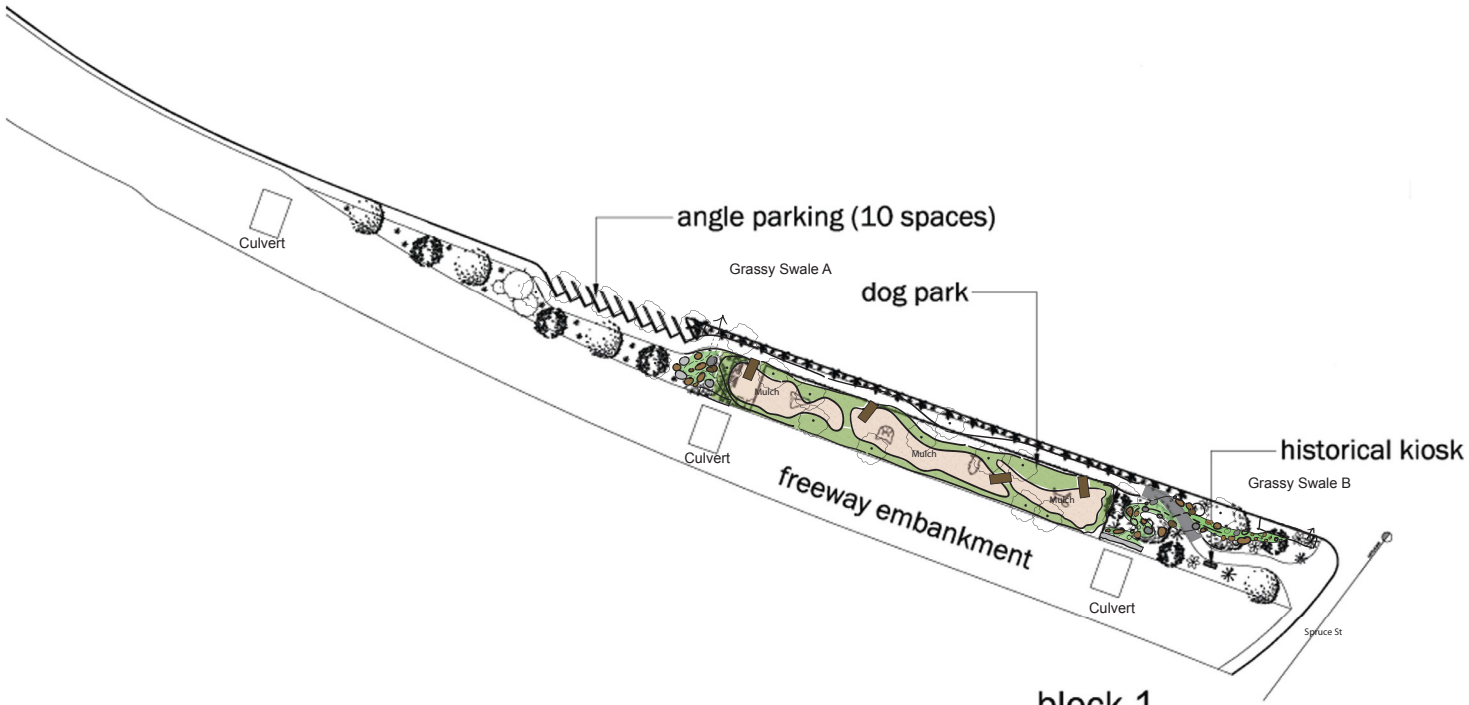
- The project includes native shrubs and trees and a 1-acre community garden and fruit tree orchard that will be managed to provide cover, nesting, and feeding grounds for native bird species, butterfly species and mammals.
- The project includes bioswales where riparian plant species will be established and taken advantage of by a variety of birds.

IRWMP Request:

$3,877,066

Appendix E

Fernwood Water Improvement Park



Trash Screen at Grassy Swale

Parking with infiltration areas

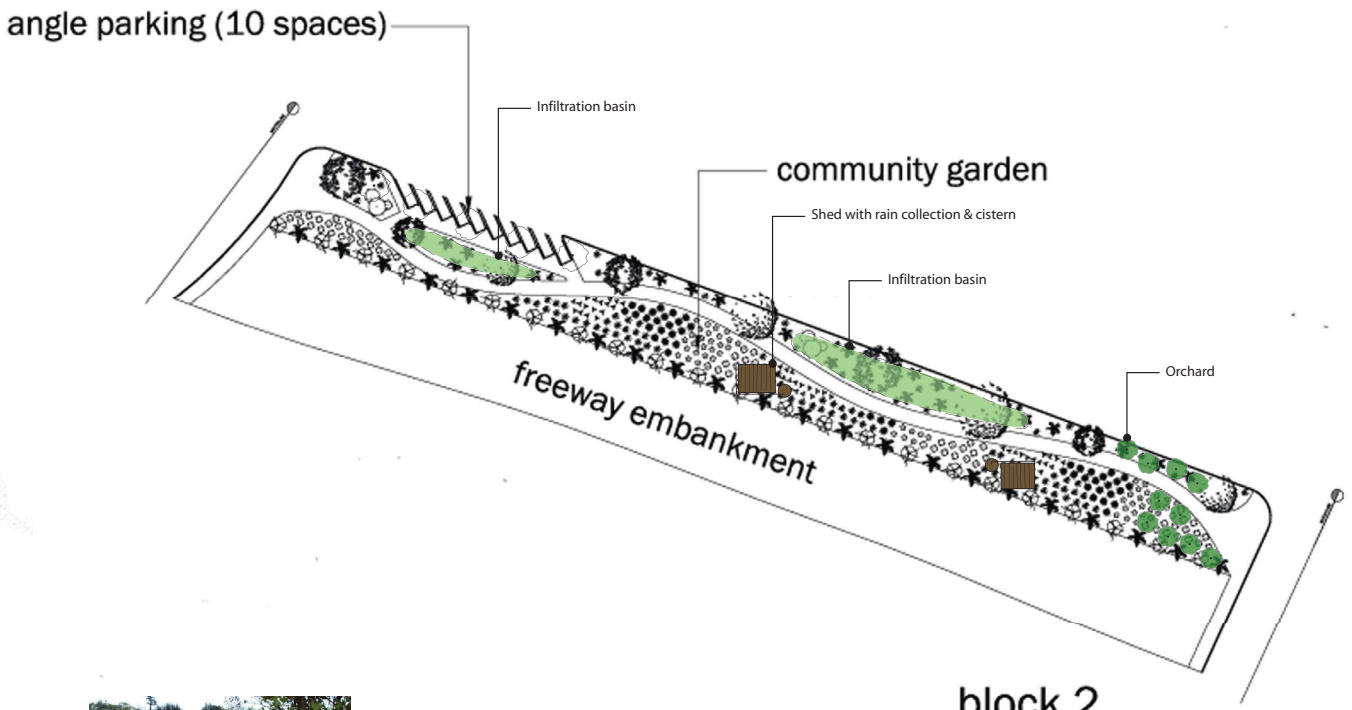
Infiltration planters

Lynwood Stormwater Filtration/Infiltration Project

March 7, 2012

Appendix E

Fernwood Water Improvement Park



Rain Barrel

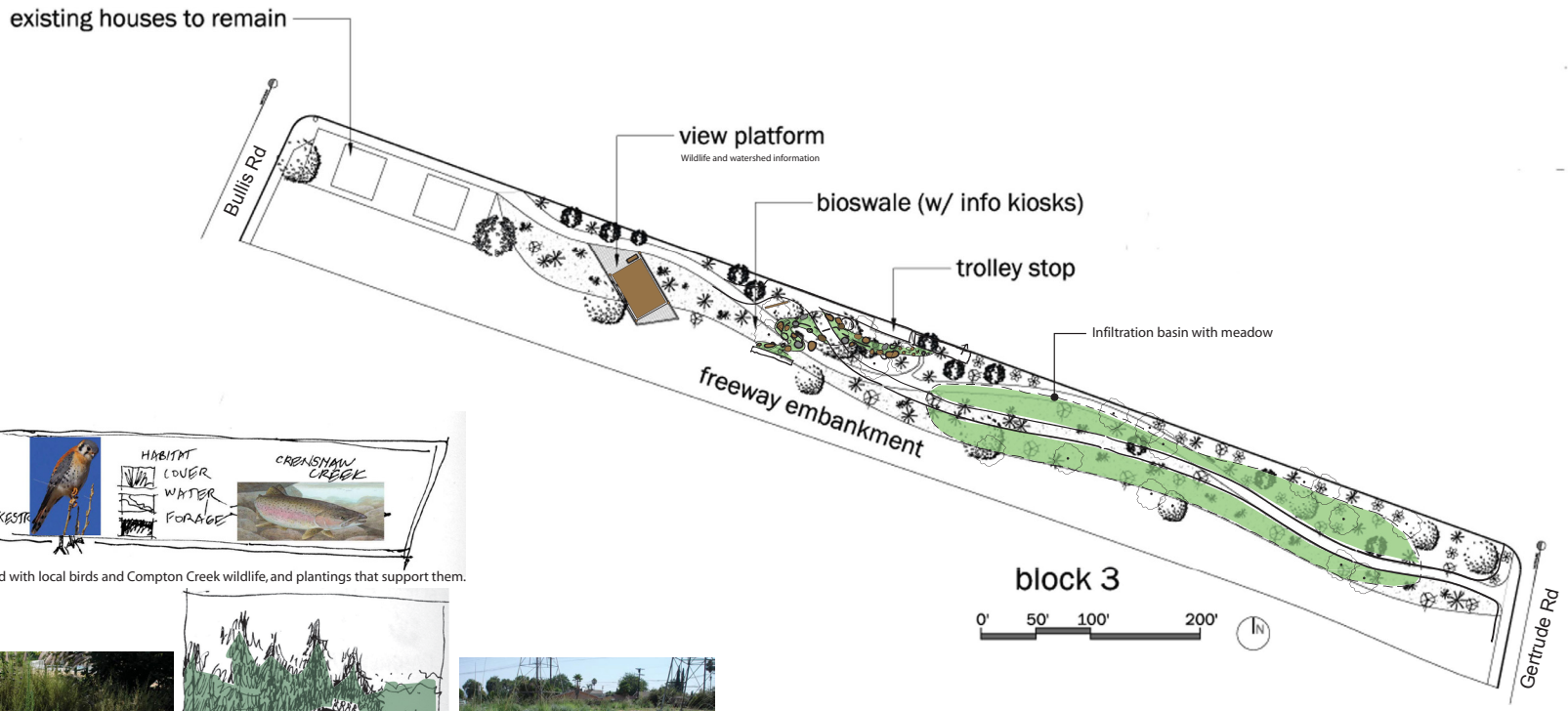
Infiltration Basin

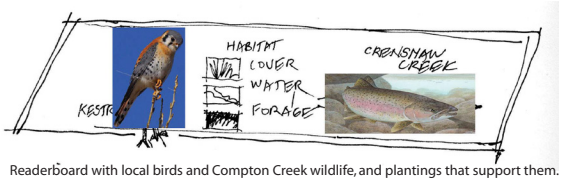
Lynwood Stormwater Filtration/Infiltration Project

March 8, 2012

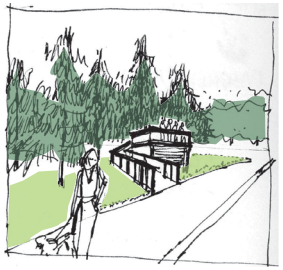
Appendix E

Fernwood Water Improvement Park





Readerboard with local birds and Compton Creek wildlife, and plantings that support them.



Wood viewpoint sketch

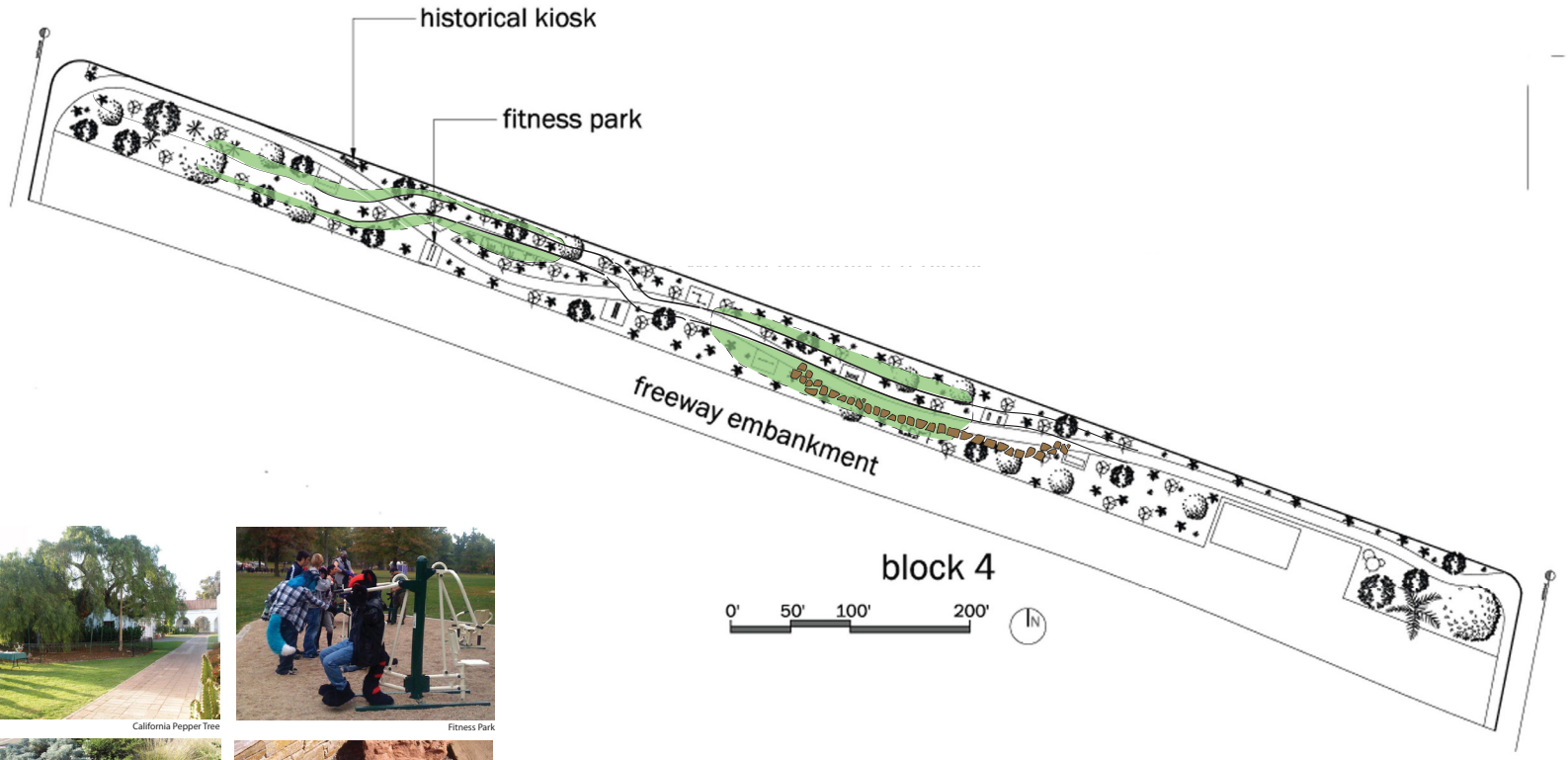
Native plantings

Lynwood Stormwater Filtration/Infiltration Project

March 12, 2012

Appendix E

Fernwood Water Improvement Park




California Pepper Tree

Fitness Park


Sage - Artemesia - Coyote Bush

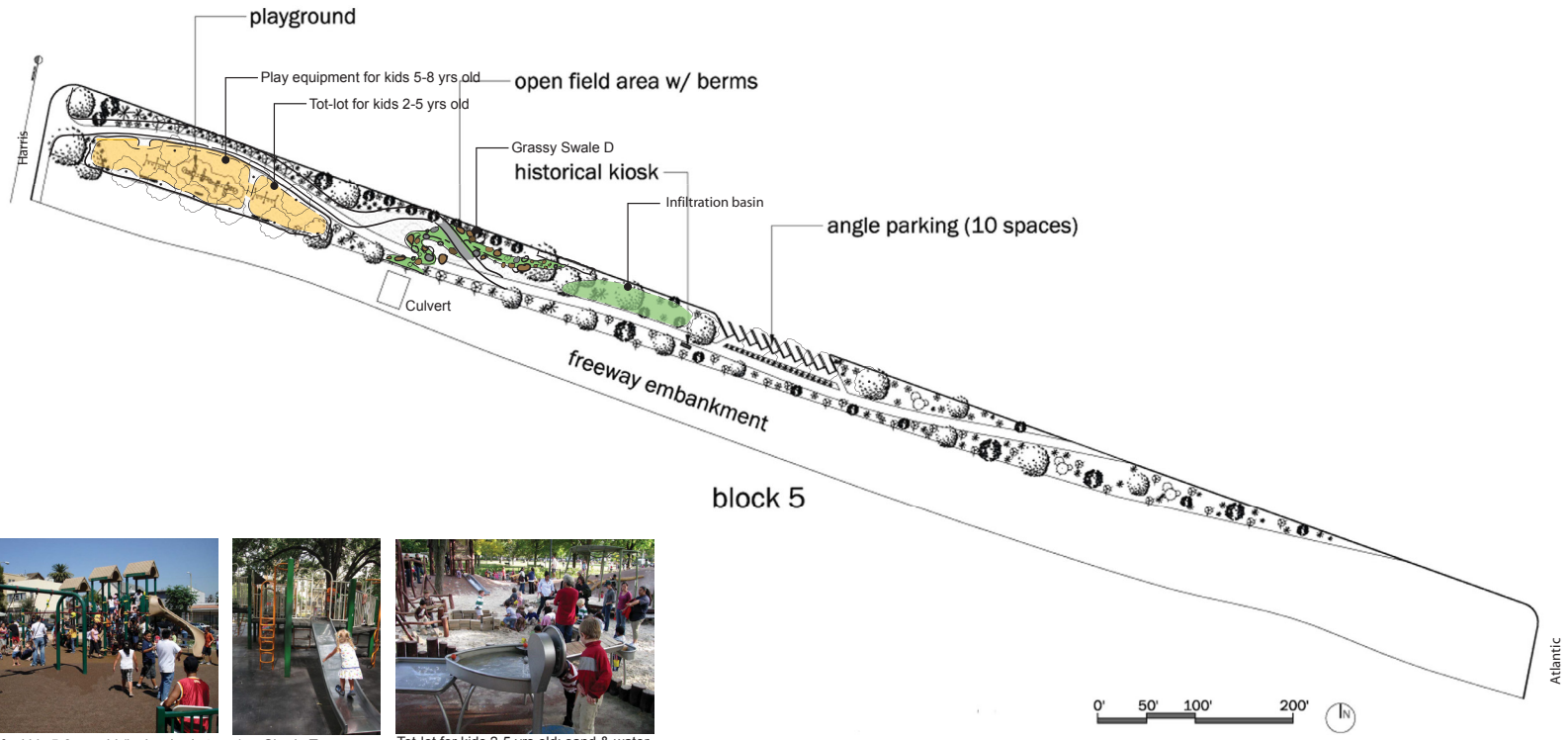

Stepping Stones

Lynwood Stormwater Filtration/Infiltration Project

March 12, 2012

Appendix E

Fernwood Water Improvement Park

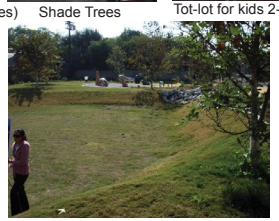


Tot-lot for kids 5-8 yrs old (lacks shade trees)

Shade Trees

Tot-lot for kids 2-5 yrs old: sand & water

Start of Grassy Swale



Infiltration Base

Lynwood Stormwater Filtration/Infiltration Project

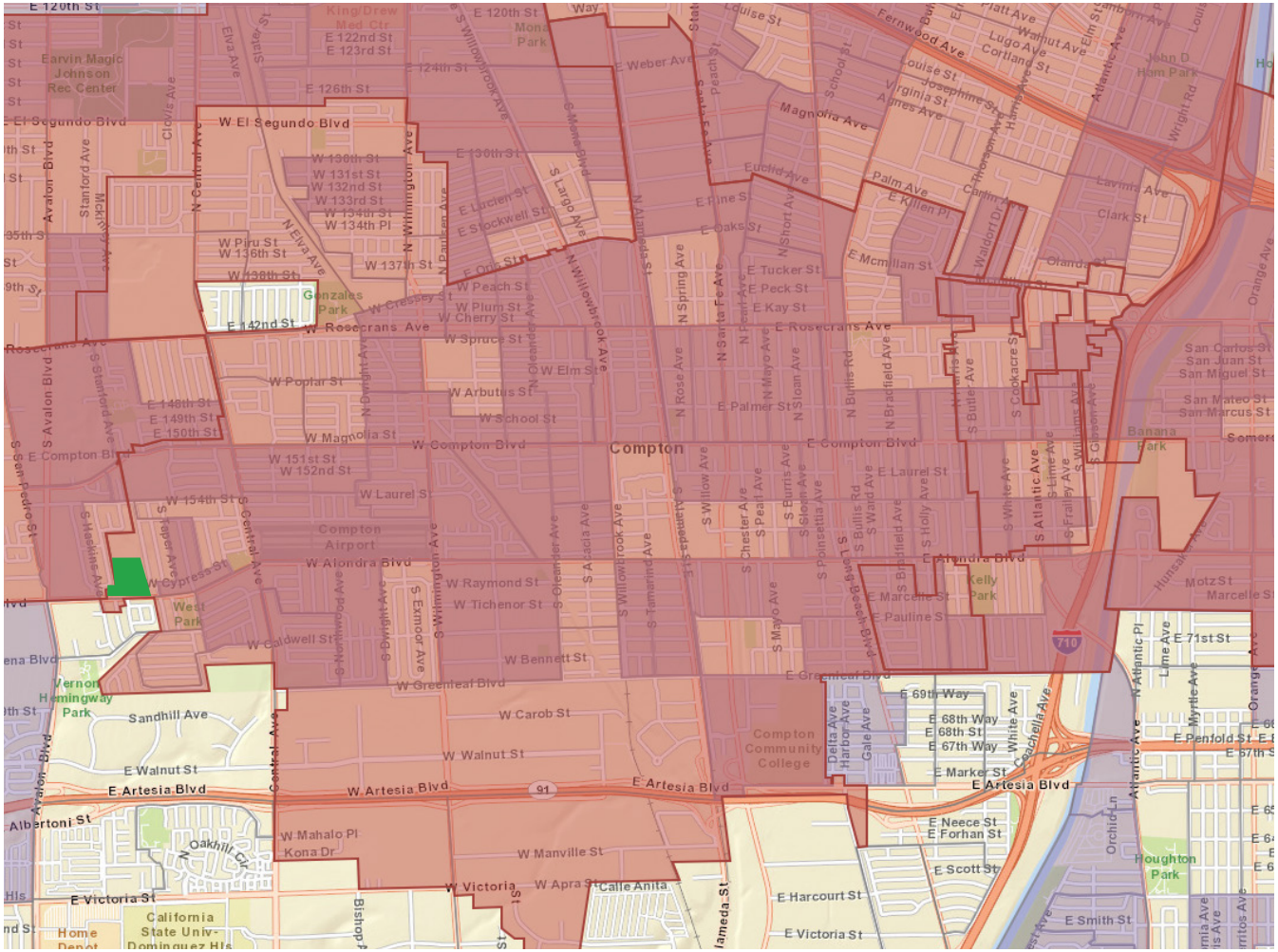
March 12, 2012

Appendix

Alondra Regional Park Site
City of Compton
Project Information

Appendix F

Disadvantaged Communities in the City of Compton

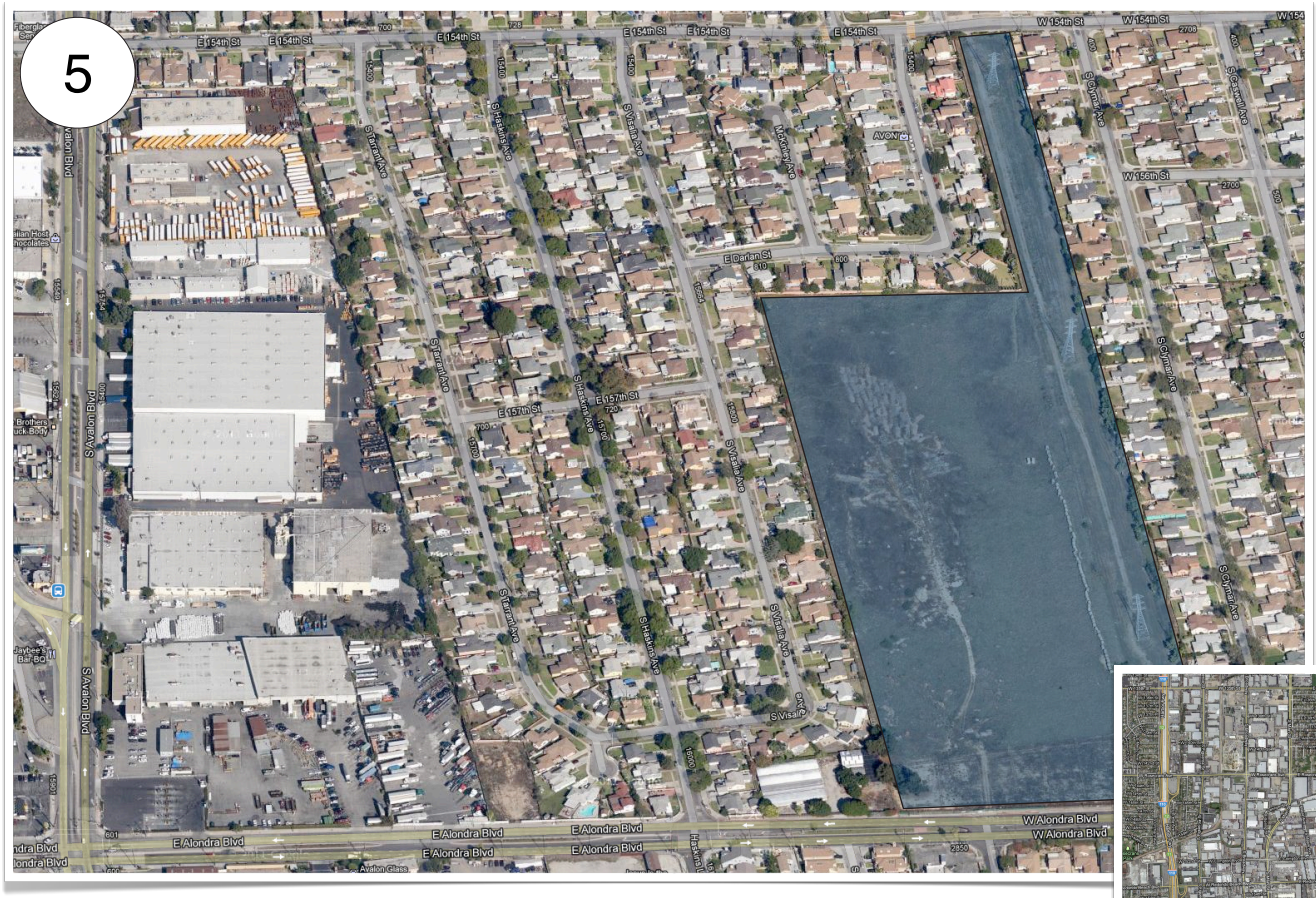


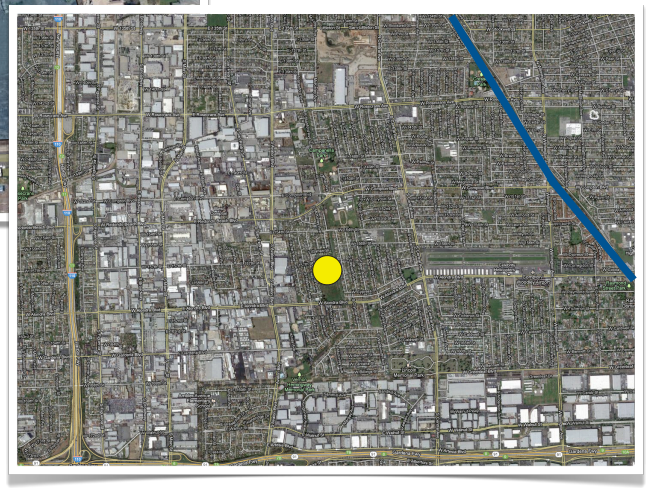
Los Angeles County Disadvantaged Communities. (2012). ARC GIS ESRI. Department of Water Resources

Alondra Site: Phase I

Appendix G

Alondra Regional Park Site Aerial





Proposed Improvement Site

Existing or currently funded Low Impact Improvements

Proposed Project Site

Compton Creek

Greater Los Angeles
Integrated Regional Water Management Plan -
Project Site Identification and Design

Proposed Site:
Alondra

Site owner:
Successor Agency of City of Compton

Location:
2801 Alondra Blvd.
Compton, CA 90220

This planning effort is funded by the Rivers and Mountains Conservancy through the "Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006" ("Proposition 84").

Appendix H

Geosyntec consultants

3415 S. Sepulveda Blvd., Suite 500
Los Angeles, CA 90034
PH 310.957.6100
www.geosyntec.com

Memorandum

Date: 22 August 2012

To: Miriam Torres, Alcanza

From: Mark Hanna, Ph.D., P.E. and Rita Kampalath, Ph.D., Geosyntec Consultants

Subject: Compton Project Prioritization
Alcanza DAC IRWMP Project Evaluation
Geosyntec Project: LA0256

Introduction

In collaboration with members of the Compton community in Southern California, Alcanza developed a list of open space projects that may be potential candidates for funding through the California Department of Water Resources Integrated Regional Water Management Plan (IRWMP) process. To assist with the selection of the project most likely to receive funding from IRWMP, Geosyntec developed a matrix by which to evaluate each project using technical criteria based on current priorities of the Greater Los Angeles County (GLAC) IRWM Plan and consistent with the Department of Water Resources IRWMP Guidelines.

The five areas in which projects will be evaluated through the GLAC IRWM process are: 1) water supply, 2) water quality, 3) habitat, 4) recreation, and 5) flood management. Benefits to each of these areas were determined using project concepts and GIS analyses applied to the criteria discussed in detail below.

GLAC IRWMP Criteria

Water Supply Potential

Benefits to water supply were determined using three separate criteria, 1) Groundwater Recharge, 2) Direct-use of captured stormwater, and 3) Water Conservation. The relative groundwater recharge benefits were determined by comparing the location of each proposed project site to potential recharge locations as defined in the Water Replenishment District's "Stormwater Recharge Feasibility and Pilot Project Development Study" (WRD, 2012). Direct-use scores were determined based on the whether the project design and planning involved onsite use of stormwater for irrigation or other non-potable purposes. Water conservation benefits were based on the ability of the project to reduce pre-implementation water use, or minimize post-implementation water demand through landscaping and irrigation design practices.

Water Quality Potential

Water quality targets in the GLAC IRWMP are based on increasing stormwater capture capacity, or equivalent treatment capacity, in the Region. Impacts of the proposed projects on storm water quality were therefore determined based on estimates of the capacity of the completed project to capture, treat or infiltrate stormwater as well as dry weather flows onsite, as well as on the size of the project tributary area, which is the area that drains to the site. Site soil types, which would affect infiltration capacity, as well as proximity to storm drains, such that it would be economically feasible to redirect flows and capture them onsite, were also considered for scoring purposes.

Habitat Potential

Impacts of the proposed project to habitat resources were determined based on several criteria, including the ability of the completed project to provide or enhance habitat for native wildlife populations. In addition, the project location was compared to maps of areas identified as being particularly beneficial for habitat development based on locations of existing or historic wetlands, or, in the case of uplands areas, ideal locations for placement of buffers. Sites that were buffered from development and human disturbance (thereby being more attractive to wildlife) or that could provide linkages to other habitats were scored higher.

Recreation and Greenway Potential

Proposed project benefits to recreation were determined based on the ability of the completed project to serve as a recreational resource to the community by providing urban park space, open space or greenways. The project location was also compared to areas identified as having a high need for additional recreation resources, based on recreation area to population ratios. Sites with high visibility, easy access and adequate space for addition of park space, recreational facilities, or linear green space (in the case of greenways), were also scored higher.

Flood Management Potential

Benefits of the proposed projects to regional flood management were evaluated based on comparison of the project location as well as areas downstream of the project location to areas with unmet drainage needs. Areas with unmet drainage needs consist of flood management resources or areas needing additional flood mitigation measures identified as FEMA Special Flood Hazard Areas (SFHAs). Projects with the ability to reduce flows to areas of high need or to key flood management resources such as waterways used as flood management channels, thereby essentially increasing the flood management capacity of these resources, were determined to have positive impacts on regional flood management.

Table 1. Glossary of Terms

Term	Definition
Greenway Potential	Site would potentially benefit from the construction of a recreational greenway. Higher scoring sites have high visibility, easy access, and sufficient available space for the addition of a linear green space.
Habitat Potential	Site has potential to provide or enhance habitat for native flora and fauna. Higher scoring sites provide connectivity to other habitats and buffered from development and human disturbance.
Pollutant Index	Potential project sites are scored relative to one another with a pollutant weighting factor to prioritize them based on priority pollutants of concern identified within their specific subwatershed, as well as the site's ability to provide adequate treatment.
Recreation Potential	Site would potentially benefit from the construction of a recreational area. Higher scoring sites have high visibility, are located in an area not adjacent to other recreational facilities, allow for easy access, and include sufficient available space for the addition of parks, recreational areas, and recreational facilities.
Stormwater Capture Capacity	The site is able to capture contributing surface flow by capturing and treating and/or infiltrating the stormwater and dry weather flows onsite. High scoring sites have larger tributary areas, relatively good soil types and sufficient space available for infiltration to occur. It is also possible for storm drain flow to be redirected and captured at the site if it is located in close enough proximity to a storm drain to make it economically feasible to do so.
Stormwater Direct Use	Stormwater can be used directly onsite for irrigation or other non-potable purposes.
Stormwater Recharge Potential	The site has potential to recharge natural aquifers through infiltration into the underlying soils. High scoring sites are located in areas that may have direct connections to the underlying potable aquifer, are significant in size, have access to adequate surface water flows, and would not adversely impact groundwater quality.
Unmet Drainage Needs	The site and/or or areas adjacent or downstream of the site are identified as FEMA Special Flood Hazard Areas (SFHAs) and the project has the ability to reduce flows to these areas. Higher scoring sites may be in depressed locations or be located on in-situ soils with low hydraulic conductivity.
Water Conservation	Sites with higher scores have the potential to reduce current water use at the site, and are able to minimize water demand through water-conscious planting and irrigation design practices. Water use onsite would be kept at a minimum.

Evaluation Results

Based on the criteria described above, proposed project sites were given relative scores that were used in conjunction with community input to select a single project for the Compton community as a candidate for seeking funding through the IRWM process.

Figure 1. Compton Site 5

Based on the technical evaluation described in the previous section, Site 5, shown in Figure 1, received the highest ranking of the Compton community sites. This site received the highest ranking based on its high visibility and easy access, again making it a good location for community recreational space. In addition, its large area allows high potential stormwater capture capacity, and its location within the Dominguez Channel watershed means that treatment of stormwater flows to the site would contribute to meeting TMDLs and mitigating 303d impairments for that waterbody.

The selection matrix for the suite of proposed project sites is included as Attachment 1 to this memo. Maps for each of the proposed project sites in Compton were developed to assist in determining each site's strengths and weaknesses and are included as Attachment 2.

References

Water Replenishment District, Council for Watershed Health, Geosyntec Consultants and Santa Monica Bay Restoration Commission, 2012. Stormwater Recharge Feasibility and Pilot Project Development Study.

Geosyntec Consultants, 2012. GLAC IRWMP Surface Water Quality Objectives and Targets, Memorandum, June.

Geosyntec Consultants, 2012. GLAC IRWMP Flood Management Objectives and Targets, Memorandum, August.

RMC Water and Environment, Geosyntec Consultants, 2M, Richard Ambrose, GreenInfo Network, Solution Strategies International and Aubrey Dugger, 2012. The Greater Los Angeles County Open Space for Habitat and Recreation Plan, June.

Los Angeles Regional Water Quality Control Board, 1994. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, June.

Alcanza Project Evaluation
22 August 2012

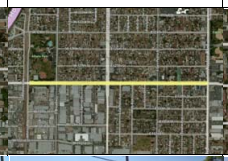
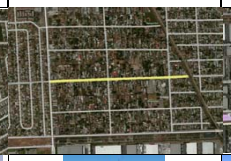
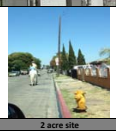
Attachment 1 – Prioritization Matrix for Compton Projects

COMPTON DAC PROJECT SITING ALTERNATIVES for the DEPARTMENT OF WATER RESOURCES INTEGRATED REGIONAL WATER MANAGEMENT PLAN

Developed by Geosyntec consultants (engineers | scientists | innovators)

Developed for alcanza

Candidate Sites for the DAC IRWMP Project in Compton, California

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 8	Site 10
	Corner of Imperial and Central	118th Street and Success to Compton Creek	El Segundo between Avalon and Athens	Corner of Compton and Central	Close to Avalon and Alondra	Caldwell Street between Wilmington and Compton Creek	Close to Artesia and Alameda
							
							

IRWMP Category	Weight	Subcategory	Subscore	2.5 acre site	0.4 acre site	3 acre site	1.7 acre site	22.4 acre site	2 acre site	5 acre site
Water Supply	40	Water Conservation Subscore	10	0.0	1.0	0.0	0.0	0.0	0.0	0.0
		Stormwater Direct Use Subscore	10	0.6	0.0	0.1	0.76	10.0	0.4	1.1
		Stormwater Recharge Potential Subscore	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			TOTAL	0.6	1.0	0.1	0.76	10.0	0.4	1.1
Water Quality	30	Pollutant Index Subscore for Nitrate	5	10.0	10.0	15.0	10.0	10.0	10.0	15.0
		Pollutant Index Subscore for Metals	10	4.0	4.0	7.0	5.0	5.0	4.0	5.0
		Stormwater Capture Capacity Subscore	15	3.5	1.5	10.3	5.7	14.2	7.4	15.0
			TOTAL	17.5	15.5	32.3	20.7	29.2	21.4	35.0
Habitat	10	Habitat Potential Subscore	10	8.0	4.0	2.0	4.0	8.0	2.0	8.0
			TOTAL	8.0	4.0	2.0	4.0	8.0	2.0	8.0
Recreation	10	Potential Recreation Subscore	5	3.0	1.0	1.0	3.0	5.0	2.0	3.0
		Greenway Potential Subscore	5	3.0	0.0	1.0	0.0	3.0	5.0	5.0
			TOTAL	6.0	1.0	2.0	3.0	8.0	7.0	8.0
Flood Mgmt	10	Unmet Drainage Needs Subscore	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FINAL SCORE				32	22	36	28	55	31	52
RELATIVE SCORE (OUT OF 10)				6	4	7	5	10	6	9
STRENGTHS				High visibility, direct connection to Compton Creek. Ideal for a recreational area, close to storm drain, partial County ownership.	High visibility and easy access. County ownership.	High visibility and easy access, large treatable surface flow tributary area, near high runoff volume area, County ROW, very high cost to realize benefits.	High visibility and easy access, ideal for recreational area, partially CRA owned.	High visibility and easy access, ideal for recreational area, in or near high runoff volume area, large site, designated as a park.	Direct connection to Compton Creek. High visibility and easy access, public ROW, very large community support.	High visibility, direct connection to Compton Creek, potential to drain large surface area.
WEAKNESSES				Low community support, extremely high cost to realize benefits.	Near existing recreational facilities, minimal treatable surface flow tributary area, near groundwater contamination.	Potential utility line issues, recreational areas nearby, near groundwater contamination.	Located on a groundwater contamination site, not within unincorporated area.	Former landfill and dumping site.	Potential utility line issues, not in unincorporated area.	recreational needs are minimal, extremely high cost to realize incremental benefits.
GEOSYNTEC RANKING (incoporating strengths and weaknesses)				**3**	**5**	**3**	**4**	**1**	**2**	**2**
Incorporate as the DAC IRWMP Project?				**no**	**no**	**no**	**no**	**yes**	**no**	**no**

Appendix H-1

Alondra Regional Park Project Summary — 2801 Alondra Blvd. Compton

Project Summary

The Alondra Regional Park site is currently an 18-acre lot owned by the Successor Agency in the City of Compton. The IRWM proposal is for 12-acres of the parcel. The park provides recreational opportunities while improving surface water discharges into the Dominguez Channel, which has approved TMDLs and is listed as impaired for a host of pollutants.

Community Benefits

Alondra regional park would help address environmental injustices in Compton by providing 12 acres of open space and 9 acres for recreation. The project includes a circular trail for passive recreation, and a playground for active recreation. The large open field would occasionally serve as a recreational and events space.

Water Benefits

- The park features a bioswale that is expected to capture and treat 1.5 AF of stormwater.
- It also has the potential to treat 10.7 AF of stormwater with a daylighted stream.
- The site has a large biofiltration field to reduce peak flows and improve water quality.
- These features would remove nutrients and pollutants that otherwise flow to local waterways.

Habitat Benefits

- The project includes native vegetation and 250 trees that will provide cover, nesting, and feeding grounds for native birds, butterflies and mammals.
- The project's bioswale and stream would create riparian and upland habitat for native wildlife.

IRWMP Request

$4,110,000

Appendix I

Alondra Regional Park Concept Plan

Alondra Regional Park Site
2801 Alondra Blvd
Compton, CA 90220

- **A** **Bioswale** *with treatment train*
- **B** **Field**
  Capture and infiltration of water; Managed for habitat
  Occassional recreational use
- **C** **Recirculating stream**
  Managed for habitat; Run with water captured on-site
- **D** **Playground**
- **E** **Splash Pool**
  child-friendly facility; water captured onsite and filtered
- **F** **Future Concessions Building**
- **G** **Equestrian Trail**
  Connected to regional system
- **H** **Walking Trail**
  Connected to regional system
- **I** **Hitching Post**
- **J** **Monument Sign**
- **K** **Heart health station**
- **L** **Restroom**
- **M** **Picnic Area**

Project Partners

Alcanza's mission is to develop sustainable projects that promote resilient, healthy and vibrant communities. Alcanza is "to reach" in Spanish and embodies our goal to meaningfully engage communities in our planning efforts. Alcanza's work is rooted in environmental equity and collaborative planning.