

This document is an extract of a larger publication.

civilgrandjury.org is a project of UnGovr.org, a US-based 501(c)(3) nonprofit dedicated to government transparency and public accountability.



LOS ANGELES RIVER REVITALIZATION

The following investigative report is offered in support of the County of Los Angeles Board of Supervisors' Strategic Plan: "Foster Vibrant and Resilient Communities"; "Expand Access to Recreational and Cultural Opportunities".

I SUMMARY

The Los Angeles River has been visualized as a public resource combining ecological recovery, water conservation, and massively expanded public recreation opportunities. These visions would likely catalyze the redevelopment of the adjoining areas, impacting nearby communities. The river is currently a largely concrete channel, frequently bordered by freeways and railroad right-of-ways. The resulting "river" is critically important for flood control when infrequent but heavy rains occur. While the Los Angeles River revitalization vision has been pursued for over 20 years, a number of recent developments indicate that parts of the river will see actual improvements in the near future. This investigation has examined the intersecting efforts targeting the Los Angeles River revitalization. The Los Angeles County Civil Grand Jury (CGJ) had particular interest in the process of identifying and prioritizing the public interests in revitalization efforts.

The CGJ investigation found that the many partial plans are combining into one integrated, consistent project dealing with the entire 51 miles of the river. However, we have not found an explicit and prioritized definition of the public interests. This should be sought with public input, review, and transparency. Once obtained, the public interests should be required within all revitalization plans.

II BACKGROUND

Introduction

Los Angeles may have a reputation for glamour, but its namesake river has a definite public relations problem. The words "Los Angeles River" conjures up an image of a large but nearly-empty concrete trough—unnatural and unattractive. Even now, some parts of the River do not fit that image, and once, none of it did. We may not be able to turn back the clock, but we can expose the River's strengths and possibilities and, with care, we can make the River a source of beauty, serenity, recreation, community feeling, and even economic growth.

River History

A Vital Resource

A thousand years ago, well before the arrival of Europeans, the River served as a vital source of water and other resources for the Tongva Indians. Over two hundred Tongva were living in a settlement near what is now City Hall, when the Spanish explorer Portola arrived in 1769.¹



Picture Taken by Civil Grand Juror, March 2017

Altogether there were an estimated 5,000 Tongva in the area.² To the Tongva, the River provided not only food and water, but the reeds they used to make their sturdy, earthquake-resistant huts.³

Later, Spanish settlers clustered by the life-giving River, to be followed in time by Americans. By the 19th and 20th centuries the area around the river was an important industrial center and railway shipping corridor.⁴

Unfortunately, the River could also be a hazard. The original Pueblo de Los Angeles was “washed away” in 1815;⁵ this disaster was followed by other major floods in 1825 and 1861. Nevertheless, the growing city expanded into the River’s floodplain. Punishing floods in 1914,

¹ <http://lapw.org/wmd/watershed/LA/History.cfm>

² <http://www.la Almanac.com/history.hi05.htm>

³ <http://www.haramokngna.org/education/tongva/>

⁴ 2007 Los Angeles River Revitalization Master Plan, Executive Summary

⁵ <http://aldpw.org/wmd/watershed/LA/History.cfm>

1934, and 1938 caused major damage and loss of life; more than 100 people were lost and over 5,000 buildings were destroyed in the 1938 flood alone.⁶ The Los Angeles County Flood Control District and the U.S. Army Corps of Engineers responded by building the familiar concrete channel which contains the River along most of its course.⁷

A Neighborhood Vision, Vital Once More

Ed P. Reyes, former LA City Councilman and head of the committee that formulated the 2007 Plan, credits the genesis of the Plan to a “neighborhood vision” of the early 1990s. The vision was remaking of the disused and disreputable Taylor Yard “...from an old rail yard into a park.”⁸ Eventually that vision proved contagious. A 1996 County of Los Angeles Master Plan was adopted and in June 2002 the Ad Hoc Committee on the Los Angeles River was established consisting of five City of Los Angeles Council Members.⁹ In October 2005 public workshops drew “thousands of people” to share their opinions and ideas on river revitalization, ideas that were “captured,” as Reyes put it, in a new 2007 Plan. As the Plan went to press, Reyes noted with pride that Taylor Yard was being “transform(ed) . . . into a 40-acre state park.” Today, Reyes’ vision is named: Rio de Los Angeles State Park.¹⁰

The River Today

Today’s Los Angeles River, the starting point for any future revitalization efforts, is shown in the map below. Having “headwaters” in Canoga Park and emptying 51 miles downstream into the Port of Los Angeles, it has a watershed of 820 square miles.¹¹ From beginning to end it has an elevation change greater than the mighty Mississippi.¹² Water flows from the surrounding mountains. This region typically receives an average of 15 inches of rain a year.¹³ When heavy rains occur and/or are spread widely over the watershed area, the River suddenly can carry heavy flows.¹⁴

Over a period of years (1938-1960) the Army Corps of Engineers has locked the flow into a robust concrete channel over almost all of its 51 miles to stop it from flooding downtown Los Angeles on heavy rain days.¹⁵ ¹⁶ But these are rare in Los Angeles, so the amount of water flowing in the channel is usually only a small fraction its capacity.¹⁷ However slight the dry day flows are, the amount of water reaching the harbor is embarrassingly large for a region frequently struggling with drought.¹⁸ See map illustration below.¹⁹

⁶ <http://www.takepart.com/feature/2015/12/14/la-river>

⁷ 2007 Los Angeles River Revitalization Master Plan, Executive Summary

⁸ http://mlagreen.com/wp-content/uploads/LA-River-Revitalization-Master-Plan_2007_Exec-Summary_TOC.pdf

⁹ http://ladpw.org/wmd/watershed/la/la_river_plan.cfm

¹⁰ https://www.parks.ca.gov/?page_id=22277

¹¹ <https://dpw.lacounty.gov/wmd/watershed/la/>

¹² www.theriverproject.org › Learn › Know Your Watershed

¹³ www.laalmanac.com/weather/we13.htm

¹⁴ www.theriverproject.org › Learn › Know Your Watershed

¹⁵ www.nbclosangeles.com/.../Anniversary-of-the-LA-River-Flood-A-Look-Then-and-N...

¹⁶ <https://dpw.lacounty.gov/wmd/watershed/LA/History.cfm>

¹⁷ www.theriverproject.org › Learn › Know Your Watershed

¹⁸ www.forbes.com/.../why-does-california-let-billions-of-gallons-of-fresh-water-flow-st...

¹⁹ Map Credit: Council for Watershed Health

sewage processing plant that serves much of the San Fernando Valley and empties a reasonably clean effluent into the River. In fact, on most days, the sewage plant supplies most of the flow going down the river from it.²² The Basin is the only designated Wildlife Reserve on the River.²³

Along its length, the main channel has feeders that are mostly inactive except on a few rainy days. There are also a large number of small rainwater drains. Each feeder may contribute water with various undesirable substances in it. The pollutants are worse on rainy days.²⁴

Controlling the River flow on wet days is a task assigned to the County of Los Angeles Department of Public Works via a centralized control center in Alhambra. It is a very complex operation.²⁵ The Swift Water Rescue Team of the Los Angeles County Fire Department stands alert during periods of heavy rainfall to help people who are surprised by the sudden and dangerous river behavior.²⁶

At various places along the banks of the Los Angeles River there are publicly accessible parks, trails and bike paths.²⁷ At other points, particularly in the downtown Los Angeles area, the river banks are occupied by railroad tracks and/or freeways, making the river essentially inaccessible.²⁸ There are also unused industrial areas, sometimes quite polluted, ripe for cleaning and repurposing.²⁹

Throughout its length the River is crossed by bridges shared by cars and people. However, these are generally widely spaced, so neighborhoods are separated by the River.³⁰

Finally, there are places along the River which have housing or industrial sites adjacent to its concrete banks. Clearly, these places are heavily dependent on the River being contained on the wettest of days.³¹

Current Plans in the Works

As this report was being written, there were four active river planning efforts which are described on the following page.

²² https://en.wikipedia.org/wiki/Tillman_Water_Reclamation_Plant

²³ <http://www.sepulvedabasinwildlife.org/sbwr.html>

²⁴ Presentation of the WaterKeeper™

²⁵ Presentation Los Angeles County Department of Public Works

²⁶ www.latimes.com/local/lanow/82268035-157.html

²⁷ folar.org/larivermap/

²⁸ <https://dornsife.usc.edu/la-walking-tour/la-river/>

²⁹ www.theriverproject.org › Projects

³⁰ https://en.wikipedia.org/wiki/List_of_crossings_of_the_Los_Angeles_River

³¹ losangeles.cbslocal.com/2016/01/.../banks-of-los-angeles-river-to-be-raised-temporari

“Alternative 20”³²

This plan for the lower 11- mile stretch of the river within the City of Los Angeles, Griffith Park to Downtown, is the result of an agreement between the US Army Corps of Engineers and the City and was a part of the Federal Water Resources Development Act (WRDA). Implementation costs are to be shared by the Federal government and the City of Los Angeles and are currently estimated at about \$1.36B.

The goals of the plan are both habitat restoration and recreational provisions. The most significant feature of the river in this area is its “soft bottom.” Unlike most of the current channel, the river bottom is actual soil, not concrete. Plants can grow in the soil. Most of the cost of the project would be incurred by the purchase and cleaning of the adjoining land. The City of Los Angeles has purchased the G2 parcel for \$60M. The G2 parcel is a critical 41 acres of the Taylor Yards, previously a railroad switching facility. Cleanup costs are estimated to be several times this amount. The Army Corps of Engineers is about to begin more detailed design work.³³

Lower Los Angeles River Working Group (AB530)³⁴

Supported by California State legislation, a Working Group has been formed to develop a revitalization plan for the Los Angeles River’s southern 21-mile segment from the southern border of the City of Los Angeles (about Washington Blvd) to the harbor. The working group consists of 39 members from 37 organizations with staff from The Rivers and Mountains Conservancy. Membership represents all adjoining municipalities, the County, and various interested Non-Governmental Organizations (NGO). To date the Group has met six times. There is about \$50M budgeted from a previous Water Bond issue for the current work. Release of a plan is intended for February 2018. Currently there is no funding identified for implementation. The intent of the Lower Los Angeles River Working Group is to complement the County of Los Angeles’ revised 51-mile plan.

The scope of the Lower River Plan is to include the Rio Hondo and Compton Creeks. The River in this area can be characterized as a high flow capacity, concrete channel which is designed to handle heavy rain events. Flood control during these events is the overwhelmingly highest priority in this river section because of areas built right up to the River’s edge.

The Lower Los Angeles River Working Group started work slightly earlier than the revised County Los Angeles River Master Plan team.

County of Los Angeles Revised Plan³⁵

In 2016 the County of Los Angeles Board of Supervisors (BOS) ordered an update to the Master Plan for Revitalization of the Los Angeles River that was originally released in 1996. This effort deals with the entire 51 miles of the river. This includes the upper 30 miles that are within the City of Los Angeles, together with the lower 21-miles which is the topic of the previous section. In particular, the City river run contains the 11-mile section that had been identified by the City

³² www.spl.usace.army.mil/Portals/17/docs/publicnotices/DraftIntegratedReport.pdf

³³ Telephone interview with local USACE official.

³⁴ Interview with County of Los Angeles Department of Public Works person in charge of revising the 1996 plan.

³⁵ la.curbed.com/2016/10/18/13326094/county-will-update-la-river-master-plan

and the US Army Corps of Engineers for revitalization under partial funding from the Federal government.

The BOS's action is intended to provide a unifying force to the overall river revitalization efforts. It is based on the County's authority to manage the flood control functionality of the river. Supervisor Kuehl cleverly captured the spirit of the County's action: "We wanted to avoid plan-demonium."³⁶

As this report is being written, the overall organization of Master Plan revision effort is under way but no meetings have been held. The effort is intended to be collaborative, building on as much of the previously done planning as possible while achieving overall coordination. Like most of the other revitalization efforts the immediate targets are plans; but funds for implementation have not been identified.

LA River Index³⁷

This is a publicly available, online collection of information gathered and generated over a 25-year period about the Los Angeles River and the possibilities for its improvement. It is from a non-profit organization, River LATM, which has the mission statement: "We integrate design and infrastructure to bring people, water and nature together along all 51 miles of the Los Angeles River."

The collection was produced by Frank Gehry and his team, partners Tensho Takemori and Anand Devarajan, with GeosyntecTM and OLINTM. The index covers the following topic areas: Flood Risk Management; Water Recharge; Water Quality; Greenhouse Gases; Ecology and Habitat; Open Space and Parks; Public Health and Social Equity; Transportation; and Programming.

Existing Ecological State of the Los Angeles River

A Vital Natural Resource

It is surprising to learn that the Los Angeles River still supports many species of plants and animals, even fish.³⁸ This is despite the fact that 90 to 95 percent of the original riparian³⁹ habitat has been lost to channelization and urbanization. Nearly all of the original wetlands are gone. The only remaining riparian habitat areas are in the Sepulveda Flood Control Basin and the Glendale Narrows which are soil-bottomed – not concrete. The 225-acre Sepulveda Basin Wildlife Preserve is at risk from both flooding and direct human actions.⁴⁰

What has been lost? Animals, of course, and some of the plants they and the Native Americans and European settlers depended on. Those parts of the watershed which still exhibit part of their original ecosystems can give us an idea of the area's original ecological state. For example, the

³⁶ <http://supervisorkuehl.com/board-votes-to-update-la-river-master-plan/>

³⁷ riverlareports.riverla.org/

³⁸ http://eng.lacity.org/techdocs/emg/docs/lariver/LA_River_Reader_Guide.pdf

³⁹ Note: riparian => river, creek, or stream banks

⁴⁰ lariver.org/ecosystem

sturdy-looking toyon shrub whose red berries caused settlers to think they were holly, giving Hollywood its name.⁴¹

The 2012 State of the Watershed Report lists eight separate plant natural habitats of the Watershed; only dry chaparral is “still abundant.” The others are described as fragmented, sensitive, and “heavily impacted.” The River in its natural state protected itself. The roots of the flood-resistant arroyo willows prevented erosion of riverbanks and cottonwood roots reached deep to help purify groundwater. But the River’s natural life-support system has been diminished and compromised.⁴²

Creatures of the River Habitats

Some species are beloved and iconic, like mule deer, bobcats, grey foxes, badgers, and mountain lions. Some, like the California Brown Pelican (E⁴³), California Least Tern (E), Least Bell’s Vireo (E), Red-legged Frog (T), Arroyo Toad (E), Arroyo Chub (T), and Santa Ana Sucker (T) are listed as threatened or even endangered. One perished victim is the Steelhead Trout. Three-foot specimens of this fish were common here before channelization,⁴⁴ but the steelhead now appears to be gone.⁴⁵

Estimates for number of bird species sighted in or along the river is over 300!⁴⁶ The River is a migration stopover for many bird species.

Defining the public interest and priorities

Deserved or not, there is concern that Los Angeles River Revitalization will generate private profits from a public investment in the River while underserving public interests.⁴⁷ There are rising property values in Elysian Valley from the “Alternative 20” agreement.⁴⁸ Is river revitalization causing the neighborhood to be gentrified? Are previously satisfied residents being expelled and future ones who cannot afford the higher housing costs, disqualified? If that happens in Elysian Valley, why won’t it happen along the entire 51 miles of the revitalized River? An initiative on the March, 2017 ballot - Measure S - demonstrated how deeply these concerns are held and how destructive to Los Angeles progress they may become.^{49 50 51}

An antidote to these negative public reactions may be an explicit definition of the legitimate public interests in river revitalization, giving priority to these interests in future river projects.

⁴¹ <http://www.theriverproject.org/learn/habitat/native-plants>

⁴² Ibid.

⁴³ Note: (E) indicates an officially endangered species; (T) indicates threatened.

⁴⁴ <http://www.theriverproject.org/learn/habitat/wildlife>

⁴⁵ <http://www.latimes.com/local/la-me-adv-steelhead-search-20140517-story.html>

⁴⁶ <http://www.theriverproject.org/learn/habitat/wildlife>

⁴⁷ <https://www.thenation.com/.../will-the-los-angeles-river-become-a-playground-for-the...>

⁴⁸ la.curbed.com/2014/6/4/.../how-will-la-mitigate-gentrification-on-a-beautified-la-river

⁴⁹ https://ballotpedia.org/Los_Angeles,_California,_Changes_to_Laws_Governing_the_...

⁵⁰ Note: Measure S was an initiative that sought to slow high density development in the City of Los Angeles and included a 2-year moratorium of such development.

⁵¹ Note: For example, restricting dense housing would lead to even higher housing costs in a market that is already amongst the most expensive in the nation.

In the following section we will explore a potential list of public interests.

Maintain/improve flood control function:

We have been warned about the unpredictable and destructive behaviors of the original wild Los Angeles River.⁵² There is absolutely no desire to return to that situation. The rapid descent and occasional high flows from the watershed have been tamed by the existing concrete channel.⁵³ Nothing should be done to the river that increases the flooding risk over the current protections. There may be “higher risk” sections where flood protection could be improved.⁵⁴

Consideration should be given to the possibility that global warming/climate change effects may generate rain events more severe than have been previously experienced, even while Southern California gets drier.⁵⁵ Resetting expectations for 100-year and 1,000-year rain events may be appropriate when deciding on the appropriate level of flood protection.

Provide safety for all river flow rates:

Unfortunately, we have recently suffered a river drowning.⁵⁶ This proves that the Los Angeles River has not been rendered totally safe for people venturing near it despite a largely fenced-in protective system. Experience shows that the river is most dangerous when it is in an “excited”, high flow rate condition. River flow changes can occur very rapidly when rainfall is heavy because of the large watershed area and rapid descent.

Many of the proposals for river revitalization include more public access to the river’s surrounds.⁵⁷ The accesses need to be complemented by safety measures which minimize tragic results from rapid river flow changes. An example might be an alarm system indicating imminent changes sensed upstream. Such an alarm system must, in turn, be complemented by clearly marked paths to safety by rapid egress if required. The river should be a safe place to enjoy.

Improve water quality in the river:

Recent measurements of river water have shown unacceptably high levels of biological agents and toxins even at normal low flow rates.⁵⁸ These are not acceptable for a body of water that passes near so many of our citizens and empties into the harbor and ocean. If the river is to be more accessible for recreation, it is more important that the flow be free of dangerous substances.

Cleaning the river water is difficult given the exposure to runoff from so many different activities as the river winds through Los Angeles County. It is even more difficult during a heavy rain event where all the sources of toxins, like those that have accumulated on the streets, sum to a dangerous mixture.

⁵² <http://www.lamag.com/citythinkblog/citydig-when-the-los-angeles-river-ranwild/>

⁵³ www.theriverproject.org › Learn › Know Your Watershed

⁵⁴ www.latimes.com/local/.../la-me-ln-los-angeles-river-flood-zone-20161017-snap-story.h...

⁵⁵ www.latimes.com/.../op.../la-oe-debuys-drought-foretells-future-20150817-story.html

⁵⁶ www.latimes.com/.../la-me-ln-missing-boy-accidental-drowning-20170228-story.html

⁵⁷ lariver.org/blog/visit-la-river

⁵⁸ <https://www.healthebay.org/sites/default/.../LA-River-study-press-release-FINAL.pdf>

Recover river ecosystems:

Estimates are that 95 % of the flora and fauna of the Los Angeles River area has been lost in its current state.⁵⁹ The concrete channel is not conducive to plant recovery and this has led to loss of animal life. Ecosystem recovery along the Los Angeles River is an important contribution to the community. Plans for revitalization should support this end. Emphasis should be on reestablishing native flora and fauna populations to the fullest extent possible.

Improve water flow to underlying aquifers:

The County of Los Angeles Department of Public Works and other agencies have explicit knowledge of the state of the local underground aquifers.⁶⁰ This awareness is coupled with a disciplined approach in controlling access to them. However, we could improve our aquifer refilling practices as a part of the river revitalization. When there is a rain event in Southern California, a very high percentage, greater than 50%, of the water falling in the Los Angeles River watershed is quickly emptied into the harbor.⁶¹ Many of the plans offered for river revitalization include riverside diversion ponds which could capture a significant amount of runoff and allow it to soak through the ground into the aquifers. These are frequently presented as versatile public recreational facilities depending on their fullness.⁶²

Provide for public recreation:

Imagine 51 miles of linear parks and a 51 mile continuous riverside bike path! These would wind through areas of the County currently without many public recreational facilities.⁶³ These are possibilities as a part of the river revitalization. Some of these facilities already exist along the river.⁶⁴

Access to public restrooms at conveniently close points in these parks must be addressed. In order to exploit the recreational opportunities, there must be access points from public transportation and some limited amount of parking. It would be pleasant to access some refreshments available near the parks.^{65 66}

Control impacts on existing adjoining communities:

This is perhaps the most complex of the public interest areas in river revitalization. If the current river configuration is improved by revitalization, the adjoining neighborhoods will become more desirable. Property values will increase. Investors, sensing opportunities for profit, will

⁵⁹ newsroom.ucla.edu/stories/the-future-for-wildlife-in-a-revitalized-l-a-river

⁶⁰ From an overview of the Department of Public Works of the County of Los Angeles.

⁶¹ www.dailynews.com/...and.../how-does-los-angeles-county-use-storm-water-runoff

⁶² http://boe.lacity.org/larivermp/CommunityOutreach/pdf/LARRMP_Final_05_03_07.pdf

⁶³ http://boe.lacity.org/larivermp/CommunityOutreach/pdf/LARRMP_Final_05_03_07.pdf

⁶⁴ folar.org/larivermap/

⁶⁵ From interview with RiverLA representative.

⁶⁶ Note: An on-river snack source was mentioned as a positive example of a public/private partnership by one involved RiverLA official during an interview.

participate in increasing property values. More affordable neighborhoods become less affordable, and, over time, the communities of people living there change. They are “gentrified.”⁶⁷

There are three distinct viewpoints on gentrification.⁶⁸

1. People who were satisfied with their neighborhood see it change because of river improvements. The improved river is better and they enjoy it. But the neighborhood culture is changing. Neighbors become more affluent with potentially different interests. Neighborhood businesses adjust to serve their new customers. The change is beyond the control of the original residents. They may feel discomfort from the changes. Their property is worth more. They could sell to get more money. But where can they afford to live now? Where do they want to relocate?
2. For people wanting to find a neighborhood with pleasant nearby parks at reasonable but rising prices and with funds to invest, the gentrified neighborhood is attractive.
3. People involved in the real estate business are glad to see gentrification. It creates a new target for productive real estate investments. The property transactions resulting from gentrification produce commissions and fees for businesses providing transaction-based services: real estate agents, lenders, escrow companies, etc. However, these interests might be considered secondary to those of current or future residents.

Overall Priority of Los Angeles River Revitalization Investments

While one can endorse the principle and potential outcomes of the river revitalization, the funding is in competition with other investments that could be made with the same funds. Some of the historical proposals for revitalization would be extremely expensive, particularly when applied over the entire 51 miles of the river.⁶⁹ For all the good outcomes possible with revitalization, the fact is that the current river configuration mostly works for the highest public priorities: flood prevention and public safety for all river states.⁷⁰ This suggests that in the competition for funding, river revitalization is at a disadvantage because new its objectives are at lower priority on the public interests list.

There is the possibility of “windfall” funding sources for the river revitalization. An example is the funding split that may be offered by the Federal government for the “Alternative 20” plan.⁷¹ This would allow the City of Los Angeles to leverage local funding with that from the Federal government. This increases the motivation to invest in “Alternative 20”. It would create construction jobs and achieves some of the benefits of overall river revitalization.

Some “windfalls” could arise from private sources that see a return based on an investment in the river.⁷² An example might be a value increase for property adjoining the River that the sources have invested in. These “windfalls” need to be tested against the clearly defined public interests. Some private offers will pass that test and become viable options. It remains imperative that such

⁶⁷ <http://la.curbed.com/2016/8/30/12712942/gentrification-map-los-angeles-county>

⁶⁸ <http://www.pbs.org/pov/flagwars/what-is-gentrification/>

⁶⁹ www.citywatchla.com/.../la.../12385-cha-ching-eric-s-pet-la-river-project-balloons-to-...

⁷⁰ abc7.com/news/socal-prepping-for-heavy-rainstorm-possible-flooding/1693089/

⁷¹ la.curbed.com/2016/7/2/12064494/la-river-restoration-alternative-20-army-corps

⁷² <https://www.theeastsiderla.com/.../public-may-have-to-pay-millions-more-for-a-free-l-...>

private investments are transparent to the public; “backdoor” surprise investments could dispel hard-won public goodwill.

Because of the high cost of the work, the fact that the river is stably functional as is, and the ever-present competition for government funds, river revitalization will likely be realized part-by-part over a long period of time. This makes the disciplined identification and preservation of public interests even more important. It suggests that interests and priorities be regularly revisited to account for the changing circumstances.

III METHODOLOGY

Plans reviewed

We were fortunate that there are detailed proposals available for the Los Angeles River Revitalization from many sources and from over a 20-year period. We have reviewed these plans as a baseline for this investigation.

County of Los Angeles 1996 River Revitalization Plan⁷³

This plan deals with the entire 51 miles of the River. Many of the aspects of this plan are contained in every later plan. This plan is currently under revision by the County of Los Angeles Department of Public Works of, which is the flood control authority for the River.

City of Los Angeles 2007 River Revitalization Plan⁷⁴

This plan deals with the upstream 31 miles of the River that lies within the boundaries of the City of Los Angeles, from the official “headwaters” of the River in Canoga Park to the crossing of Los Angeles’ southern boundary at Washington Boulevard. A part of this stretch of the River has been revisited in the “Alternative 20” plan below.

United States Army Corps of Engineers (USACE)/City of Los Angeles “Alternative 20” Plan⁷⁵
LA River Index⁷⁶

Interviews

We have conducted in person or telephone interviews with many of the people involved in River Revitalization planning:

A Deputy from Supervisor Kuehl’s office

United States Army Core of Engineers (USACE) Local Office (we were provided access to the massive work done by the USACE to support the “Alternative 20” plan.)

⁷³ ladpw.org/wmd/watershed/la/la_river_plan.cfm

⁷⁴ boe.lacity.org/lariverrmp/CommunityOutreach/pdf/LARRMP_Final_05_03_07.pdf

⁷⁵ www.spl.usace.army.mil/Portals/17/docs/publicnotices/DraftIntegratedReport.pdf

⁷⁶ riverlareports.riverla.org/

Los Angeles County Department of Public Works – Senior Manager
RiverLA – Senior Manager
Los Angeles County Department of Public Works – Overall Department Overview

River Tours

In order to make the current state of the Los Angeles River familiar to us, we toured some parts of the river and some adjoining parks:

Carson Creek Overpass – a tributary flowing into the lower River
River Wetlands in Long Beach – a wetland and absorption basin, adjoining the River in Long Beach
Riverside Park 1 – an adjoining park on lower River being developed
Riverside Park 2- an adjoining park on lower River north of Riverside Park 1

Media Coverage

CurbedLA – Frogtown (Elysian Valley) Riverside Development - Blog
CurbedLA – Frogtown (Elysian Valley) Property Values Increase - Blog
CurbedLA - LaKretz Bridge Contribution - Blog
LA Times – Series of articles on Taylor Yards Purchase Opportunity / Acquisition / Clean up
LA Times – Series of articles on Arts District Development

IV FINDINGS

1. Flood control is imperative. The importance of absolutely preventing floods from the Los Angeles River persists to this day. Nothing should be done that compromises this function, which is well-served by the current River configuration.
2. There have been many disparate plans and planning efforts. Since the idea of Los Angeles River revitalization was launched by Lewis MacAdams and his Friends of the Los Angeles River (FOLAR) Non-Governmental Organization (NGO) in 1986, there have been recurrences of planning efforts aimed at making concepts into reality. Some small, disparate projects may have resulted from these plans. However, no plan has reached full implementation. This is due to high cost and competing non-river interests.
3. There have been multiple independent actions. Even now River revitalization efforts are fragmented and not well coordinated. This is true for both planning efforts and actual small-scale implementations.
4. There is a move to integrated, systematic planning. There are calls for a systematic, integrated approach in River revitalization coming from the Los Angeles County Board of Supervisors and the RiverLA Non-Governmental Organization.
5. Progress has been limited by the high costs and limited resources. Planning has not been converted to implementation because of the extremely high cost of doing something significant to the River. As usual, high costs are met with limited (public) resources.

6. Lewis MacAdams, Founder of Friends of the Los Angeles River (FOLAR), has referred to the Los Angeles River as his “50 year artwork”. Since a comprehensive implementation is too expensive, attention has turned to subsets of the plans which may be opportunistically affordable. Waiting for the pieces to be assembled into the whole greatly slows completion. When MacAdams referenced his “50 year artwork” with respect to river revitalization he seems to have gotten it right. Working on sections of the river at a time also risks not achieving a satisfying unified whole.
7. What are the public’s interests in the Los Angeles River? The plans we have reviewed seem to have posited the public interests and their priorities. There may have been efforts that we are unaware of to solicit these from the actual public. The posited public interests may turn out to be the actual public interest. We are not able to assert either of these possibilities as true based on our investigation.

V RECOMMENDATIONS

1. The Los Angeles County Department of Public Works should publicly develop and periodically review a catalog of public interests and priorities for the overall (51 mile) Los Angeles River revitalization. These should be widely published. The following are likely to be amongst the most supported interests:

- Flood Control
- Public Safety
- Water Quality
- Water Conservation
- Ecological Recovery
- Recreational Opportunities
- Impacts on Existing Adjoining Communities
- Long-term Economic Development

2. The County of Los Angeles Department of Public Works while collaboratively revising the Master Plan for Los Angeles River Revitalization should include support the catalog of public interests, once it is created. The resulting Master Plan should govern any River sub-developments.
3. The County of Los Angeles Department of Public Works, working with the Lower Los Angeles River Working Group and the City of Los Angeles, should identify priorities and funding opportunities for river development for incremental River revitalization within the overall plan developed in 2 above.
4. The Lower Los Angeles River Working Group, working with the County of Los Angeles and the City of Los Angeles should identify priorities and funding opportunities for river development for incremental River revitalization within the overall plan developed in 2 above.
5. The Mayor of the City of Los Angeles, working with the County of Los Angeles Department of Public Works and the Lower Los Angeles River Working Group should

identify priorities and funding opportunities for river development for incremental River revitalization within the overall plan developed in 2 above.

6. The County of Los Angeles Board of Supervisors should include the agreed upon public interest catalog as a requirement for revitalization plans.
7. The Lower Los Angeles River Working Group should include the agreed upon public interest catalog as a requirement for revitalization plans.
8. The Mayor of the City of Los Angeles should include the agreed upon public interest catalog as a requirement for revitalization plans.
9. The Mayor of the City of Los Angeles should include a specifically-native flora and fauna riparian experience section within its “Alternative 20” implementation emulating the original Los Angeles River ecology.

VI REQUEST FOR RESPONSES

California Penal Code Sections 933(c) and 933.05 require a written response to all recommendations contained in this report. Responses shall be made no later than ninety (90) days after the Civil Grand Jury publishes its report and files it with the Clerk of the Court. Responses shall be made in accord with Penal Code Sections 933.05 (a) and (b).

All responses to the recommendations of the 2016-2017 Civil Grand Jury must be submitted on or before September 30, 2017, to:

Presiding Judge
 Los Angeles County Superior Court
 Clara Shortridge Foltz Criminal Justice Center
 210 West Temple Street
 Eleventh Floor-Room 11-506
 Los Angeles, CA 9001

Responses are required from:

Responding Agency	Recommendations
County of Los Angeles Department of Public Works	11.1, 11.2, 11.3
Lower Los Angeles River Working Group	11.4, 11.7
Mayor of the City Los Angeles	11.5, 11.8, 11.9
County of Los Angeles Board of Supervisors	11.6

VII ACRONYMS

CGJ	2016-2017 Los Angeles County Civil Grand Jury
FOLAR	Friends of the Los Angeles River
NGO	Non-Governmental Organization
USACE	United States Army Corps of Engineers
WRDA	Water Resources Development Act

VIII COMMITTEE MEMBERS

Douglas Benedict Chair
Gerard Duiker
Gloria Garfinkel
Shelley Strohm

VEHICLE PURSUITS INVOLVING LAW ENFORCEMENT



Marcie Alvarez **Chair**
Alice Beener **Co-Chair**
Faramarz Taheri **Secretary**
Patrick Lyons
Reuben P. Santana
Joyce Simily

VEHICLE PURSUITS INVOLVING LAW ENFORCEMENT

This investigation is motivated by the County of Los Angeles Sheriff's Department (LASD) Core Value, "With integrity, compassion, and courage, we serve our communities,"¹ and a Los Angeles Police Department (LAPD) Strategic Goal, "Reduce harms from employee-involved traffic collisions" and "Reduce harms from workplace conduct".²

I SUMMARY

When a police officer engages in a vehicle pursuit, there is a potential risk of injury or death to him or her-self, the pursued and to innocent bystanders. The vehicles involved become dangerous tools, even weapons. There are unintended injuries and deaths in the County of Los Angeles (the County) from pursuits. Any pursuit must balance the increased risk against the law enforcement goals. The Los Angeles County Civil Grand Jury (CGJ) investigated the factors that determine this balance in the County. The CGJ found that these are:

- the likelihood that the potential crime causing the pursuit is one that justifies the increased risk.
- the likelihood that a vehicle pursuit will achieve its law enforcement goal.
- the likelihood that pursuits at elevated risk can cause injury or death to bystanders, the police officer, and/or the pursued.
- the quality of skill that the police officer possesses in order to evaluate the evolving risks of the pursuit, including his/her driving skills.
- the policies that govern police vehicle pursuits in the County.
- the assignment of responsibility for the consequences of a pursuit.

The CGJ has found that each of these can be a source for potentially improving police pursuit practices. With improvements in practices, the County can reduce the number of consequential injuries and deaths from police vehicle pursuits.

II BACKGROUND

A police pursuit is an event involving one or more law enforcement officers attempting to apprehend a suspected violator of the law in a motor vehicle while the driver is using evasive tactics. Evasive actions can be high speed driving, driving off a highway, turning suddenly, or even driving in a legal manner but failing to yield to the officers' signal to stop.³ A high speed pursuit is one at speeds greater than that of the normal surrounding traffic.⁴

¹ <http://shq.lasnews.net/pages/PageDetail.aspx?id=2066>

² <http://assets.lapdonline.org/assets/pdf/LAPD%20Strategic%20Plan.pdf>

³ <https://definitions.uslegal.com/p/police-chase/>

⁴ Note: Although frequently pursuits are conducted with flashing lights and sirens, these signaling devices are not required to define a pursuit according the LASD driving policy, for example.

One County Example of Unintended Consequences of Police Vehicle Pursuits

On November 15, 2015 at 8:45 pm a 15-year-old boy was decapitated after being hit by a stolen car that was fleeing the police. In court one of the officers testified that she radioed for a police helicopter and other officers so they could stop the vehicle as they followed behind. The officer stated that she and her partner continued to follow the car at speeds exceeding 60 mph without turning on their lights and sirens. They did not attempt to stop the driver as he sped along Venice Blvd. The stolen car was traveling at 90 mph when it struck the 15-year-old as he was walking across the street. The Los Angeles Police Department claimed that they were not in a pursuit, although the officers admitted in court to following the suspects' car at speeds exceeding 60 mph.⁵

A USA Today analysis shows more than 5,000 bystanders and passengers have been killed across the United States in police chases since 1979.⁶ Tens of thousands more were injured as officers repeatedly pursued drivers at high speeds and in hazardous conditions, often for minor infractions.⁷

Elevated Risk Justified?

According to a report from the International Association of Chiefs of Police (IACP) and the National Institute of Justice, 91% of high-speed chases are initiated in response to a non-violent crime. The study analyzed nearly 8,000 high-speed chases in the IACPs database. It found that 42% involved a simple traffic infraction, another 18% involved a stolen vehicle, and 15% involved a suspected drunk driver.⁸ Similar statistics are expected for the County.

These results suggest some questions. Is it worth putting lives at risk by traveling through urban areas at high speed to apprehend somebody who ran a red light? Or who failed to signal a turn? If a driver is drunk, does it make sense to engage him in a high-speed pursuit, making him even more dangerous to bystanders?

⁵ <http://www.latimes.com/local/lanow/>

⁶ USA Today July 30, 2015

⁷ Ibid.

⁸ <http://www.theiacp.org/portals/0/pdfs/ManagingPolicePursuitsExecBrief.pdf>

Pursuit Successes

Information on the probability of law enforcement success for vehicle pursuits in the County are suggested by the following data sent to us by email directly from the California Highway Patrol (CHP).

For the Reporting Period: 10/1/ 2015 through 09/30/2016:

- Count of Total Pursuits: 421
- Count of Multi-Agency Pursuits: 59

Event Terminating the Pursuit	Apprehension Count	Non-Apprehension Count
Suspect vehicle voluntarily stopped	111	-
Suspect vehicle involved in a collision	64	8
Suspect abandoned vehicle and fled on foot	33	24
Pursuit aborted by law enforcement agency	19	47
Forcible stop	18	-
Suspect vehicle escaped patrol vehicle	12	59
Suspect vehicle and patrol vehicle collided	1	-
Patrol vehicle became involved in a collision	1	-
Suspect vehicle became disabled	17	1
Unspecified	6	-
Subtotal	282	139
Total	421	

If law enforcement's goal is to achieve apprehension, the above statistics show a 67% success rate. However, in 17% of the pursuits there was a collision with the possibility of injury and/or death, and the certainty of property damage. Is this the best balance that can be realized between law enforcement goals and the risk of unintended consequences?

Injuries or Deaths from Vehicle Pursuits in California

From CHP for the County Reporting Period: 10/1/ 2015 through 09/30/2016:

	Deaths	Injuries
Suspect Driver	3	32
Suspect Passenger(s)	0	4
Officers	0	9
Uninvolved Third Party	0	0
Total	3	45

The above statistics show an 11% rate of death and/or injury from the reported 421 County pursuits reported for the period.

California leads the nation in high-speed pursuit deaths. Hopefully the state and local jurisdiction will enact legislation to limit this kind of senseless tragedy.⁹

In the City of Los Angeles (Los Angeles) there were injuries in about 15% of the pursuits in 2015.¹⁰ This was up markedly from prior years. Los Angeles has averaged 45 injuries per year from vehicle pursuits over the recent past.

At the national level, the Department of Justice stated that police pursuits are the “most dangerous of all ordinary police activities.” Police chases have killed nearly as many people as justifiable police shootings. 322 people died as a result of police pursuits in 2013.¹¹

Police Training for Vehicle Pursuits

The CGJ visited the vehicle pursuit training facilities for the LASD and LAPD. There was a wide discrepancy in the quality of the two facilities, as described below. In addition, the CGJ found that the policies for on-going pursuit training are inadequate to insure high levels of skill in the field.

Vehicle Pursuit Training for the LASD

The CGJ visited the LASD’s Emergency Vehicle Operations Center (EVOC) located in Pomona, CA. This training facility is owned by the County. The tour given by the sheriff’s field training officer showed the training for vehicle pursuits. The track and the equipment at the facility left a negative impression. This facility was at one time shared with LAPD (see next section.) To improve the operations at this facility to a higher standard, County awareness of its condition and additional funding is required.

The following are some observations of the CGJ from the EVOC tour:

⁹ <http://articles.latimes.com/print/1998/may/27/news/mn-53889>

¹⁰ Ibid.

¹¹ <https://www.usatoday.com/story/news/2015/07/30/police-pursuits-fatal-injuries/30187827/>

- LASD does not require a regular re-certification process or training for high speed driving under stressful conditions. This is a perishable skill and will deteriorate over time unless practiced.
- The 16 cars assigned to EVOC are all out of date and none of these vehicle types are used in the field.
- The LASD has a current budget of \$40,000 a year for EVOC.
- Only 40 hours of training per officer is allocated for LASD vehicle pursuits.
- A system consisting of a long hose with an employee posted on a milk crate directing the flow of water to one specific area is employed for skid recovery training.
- There are no portable lights on the track to simulate a real street corner.
- LASD trainers are not involved in patrol school where deputies are trained before being assigned to patrol duty. Patrol school might be improved by presenting pursuit information.
- The collision avoidance exercise is given while traveling at speeds of only 35 MPH. This test is intended to measure the driver's quick response avoiding cones and wrong lanes.
- It was noted that pursuit training could be enhanced if actual field experiences could be reproduced at EVOC. LASD pursuit driving trainers could investigate pursuit-related injuries at the scene to harvest this kind of information.

Vehicle Pursuit Training for the Los Angeles Police Department

The CGJ visited the LAPD Edward M. Davis training facility in Granada Hills, CA. The officer leading the tour was extremely professional and shared a vast amount of knowledge on vehicle pursuits, weapons training, and simulator training. No question went unanswered. The CGJ discovered a state of the art training facility complete with a Pursuit Training Facility that rivals a professional racetrack complete with turns, straightaways, side streets and cul-de-sacs. The buildings had class rooms, and what was described as a million-dollar simulator room which places police cadets in actual driving and pursuit simulations. There was also video shown to the cadets of what not to do after a vehicle pursuit. Our observations included:

- The facility was well organized with up-to-date equipment.
- The water reclamation system reuses the water utilized on the track.
- The fleet of cars was comparable with what was used in the field.
- The trainers displayed high enthusiasm.
- A high quality simulator provides lifelike pursuit situations to the student.
- The high quality of the state-of-the-art LAPD facility was apparent.
- Although not discussed during the tour, the LASD suggestion about bringing field pursuit injury data into training is also applicable to the LAPD.

Policies on Vehicle Pursuits

In the CGJ's opinion, the onset and execution of a police vehicle pursuit should be governed by a well-thought out policy that is internalized by officers who receive effective training. These policies should be informed by the best data available on the factors affecting a pursuit. It should be expected that the policies would be almost entirely common to all police jurisdictions. There have been some efforts to realize this ideal condition as described here.

The passage of California Senate Bill 601 (Marks) in 1993 added new language to Penal Code §13519.8. This new section required the Commission on Peace Officer Standards and Training (POST) to establish guidelines and training for law enforcement's response to vehicle pursuits. Draft guidelines were reviewed by law enforcement executives and trainers, legal advisors, communication center managers, and public representatives several times before they were approved by the POST Commission and published in 1995.¹²

Since the County has numerous police authorities, in the CGJ's opinion, it would be sensible to have a unified set of vehicle pursuit policies that apply throughout the County. By example, the LASD and the LAPD each have a different governing policy document which are not identical.¹³

As a result of Senate Bill 719, POST assembled law enforcement trainers, managers and executives, as well as members of the public to update the California Law Enforcement Vehicle Pursuit Guidelines 1995. These guidelines are not a pursuit policy. The guidelines provide a starting point for local police authorities in drafting their actual pursuit policies.¹⁴

As an example of how pursuit policies updates might reduce the risk of injuries and deaths, an FBI study in 2010 indicated that if police broke off pursuits in a manner that was obvious to the fleeing driver, he/she was likely to drive more safely within a short time. This would reduce the likelihood of the fleeing driver causing injuries at the cost of potentially allowing his escape.¹⁵

Responsibility from Vehicle Pursuits Consequences

Laws and court decisions described below have shielded police in various ways from responsibility for unintended consequences of vehicle pursuits. In the opinion of the CGJ these protections tend to reduce barriers to vehicle pursuits for police officers and their departments.

The United States Supreme Court shielded police from being sued in federal court for deaths and injuries resulting from high-speed chases, even reckless ones.¹⁷ The Supreme Court has decided that police officers are to be given maximum deference when sued for damages. The high court said officers are often forced to make split-second judgments. When a suspect ignores the law and speeds away, an officer's instinct is to pursue. The court ruled that the decision to pursue a fleeing vehicle, while perhaps unwise and imprudent, does not violate constitutional rights. The decision threw out a federal lawsuit filed by the parents of a Sacramento teenager who died in 1990 when he fell from a motorcycle while being chased by police at speeds up to 100 mph.¹⁸

(California) Senate Bill 719 modified Penal Code §13519.8 and the related Vehicle Code §17004.7. Agencies must now adopt and annually train their peace officers on a pursuit policy

¹² The California Law Enforcement Vehicle Pursuit guideline

¹³ LASD Driving Policy (3-01/090.07 thru 5-09/210.30

¹⁴ <http://www.pursuitwatch.org/stories/LAPD.htm>

¹⁵ http://lib.post.ca.gov/Publications/vp_guidelines.pdf

¹⁶ <https://leb.fbi.gov/2010/march/evidence-based-decisions-on-police-pursuits-the-officers-perspective>

¹⁷ <http://articles.latimes.com/print/1998/may/27/news/mn-53889>

¹⁸ Ibid.

that addresses each of the pursuit guidelines (from Penal Code §13519.8) in order to qualify for immunity under Vehicle Code §17004.7.¹⁹

California has one specific area of law that is unique among all 50 states. California Vehicle Code Section 17004.7 provides immunity to law enforcement for injury to and death of innocent bystanders even when officers do not follow the vehicle pursuit policy their agency has adopted. Accountability for innocent victims and the families left behind is removed.²⁰ The Supreme Court's ruling together with the California law close the door to virtually all claims resulting from police pursuits.

III METHODOLOGY

The following resources were used for this report. The CGJ Vehicle Pursuits Committee would like to express our gratitude for the openness and cooperation of the people and organizations that enabled the preparation of this report.

Tours and Interviews

- Tours of the facilities of the LASD Emergency Vehicle Operations Center (EVOC); and the LAPD Edward M. Davis Training Facility
- Visits to the County Coroner's Office; and the Bureau of Victim Service in the County District Attorney's Office
- Phone interviews with the LASD Field Operations Support Services; and the LAPD Air Bureau
- A report received from CHP

Media Coverage

- Manual of Policy from www.lasd.org
- Los Angeles Times, various articles
- USA Today, various articles

IV FINDINGS

1. Police pursuits are causing unnecessary bystander injuries and deaths.
2. Most vehicle pursuits are not provoked by serious crimes.
3. Vehicle pursuits are not assured of satisfying police goals – for example: arrests, reducing dangers to the public, issuing citations.

¹⁹ The California Law Enforcement Vehicle Pursuit guideline

²⁰ <http://www.kristieslaw.org/indexhome.htm>

4. The Sheriff's vehicle pursuit training facility EVOC is substandard, particularly when compared with the LAPD's facility. Training hours are limited and vehicles used are not the same as those used in the field.
5. The LAPD vehicle pursuit training facility sets a high standard.
6. Neither the Sheriff nor the LAPD have a policy for recurring or continued vehicle pursuit training. As a result, continuous quality of driving skill in the field cannot be assured.
7. Current vehicle pursuit policies do not reflect the best statistical information with respect to causation by serious crimes, the likelihood of law enforcement successes, and the probability that injuries or deaths that may occur.
8. Pursuit training could be made more realistic if actual field injury data associated with pursuits were incorporated in the training.
9. The legal protections of police involved in vehicle pursuits lower the barriers to initiating pursuits.

V RECOMMENDATIONS

1. The County of Los Angeles Sheriff's Department (LASD) should work with the Los Angeles Police Department (LAPD) to establish a task force to define/update sheriff pursuit policies that are likely to result in fewer civilian casualties and less property damage.
2. The LAPD should work with the LASD to establish a task force to define/update police pursuit policies that are likely to result in fewer civilian casualties and less property damage.
3. The Los Angeles City Council should recommend LAPD to adopt best practices for police policies defined in Recommendations 1 and 2 above.
4. The County of Los Angeles Board of Supervisors (BOS) should call on all police authorities within the County to adopt the best practice for pursuit policies defined in 1 and 2 above.
5. The LASD should increase the required training hours for vehicle pursuit training.
6. The LASD should require regular re-certification of vehicle pursuit skill.
7. The LAPD should require regular re-certification of vehicle pursuit skill.

8. The BOS should upgrade the County’s vehicle pursuit facility to a standard similar to the LAPD’s facility.
9. The LASD’s vehicle pursuit trainers should investigate injuries involving vehicle pursuits at the scene.
10. The LAPD’s vehicle pursuit trainers should investigate injuries involving vehicle pursuits at the scene.

VI REQUIRED RESPONSES

California Penal Code Sections 933(c) and 933.05 require a written response to all recommendations contained in this report. Responses shall be made no later than ninety (90) days after the Civil Grand Jury publishes its report and files it with the Clerk of the Court. Responses shall be made in accord with Penal Code Sections 933.05 (a) and (b).

All responses to the recommendations of the 2016-2017 Civil Grand Jury must be submitted on or before September 30, 2017, to:

Presiding Judge
 Los Angeles County Superior Court
 Clara Shortridge Foltz Criminal Justice Center
 210 West Temple Street
 Eleventh Floor-Room 11-506
 Los Angeles, CA 90012

Responding Agency	Recommendations
County of Los Angeles Board of Supervisors	12.4, 12.8
County of Los Angeles Sheriff’s Department	12.1, 12.5, 12.6, 12.9
Los Angeles Police Department	12.2, 12.7, 12.10.
Los Angeles City Council	12.3

VII ACRONYMS

- BOS** County of Los Angeles Board of Supervisors
- CGJ** 2016-2017 Los Angeles County Civil Grand Jury
- CHP** California Highway Patrol
- EVOC** Emergency Vehicle Operation Center
- FBI** Federal Bureau of Investigation
- IACP** International Association of Chief Police
- LAPD** Los Angeles Police Department
- LASD** Los Angeles Sheriff Department
- POST** Peace Officer Standards Training

VIII COMMITTEE MEMBERS

Marcie Alvarez	Chair
Alice Beener	Co-Chair
Faramarz Taheri	Secretary
Patrick Lyons	
Reuben P. Santana	
Joyce Simily	