

Chapter 8 NEXT STEPS

8.1 Introduction

Find your place on the planet. Dig in, and take responsibility from there.

—Gary Snyder

This Plan is intended to facilitate positive change in our individual and institutional behaviors that can, move us towards a more holistic, sustainable approach to managing our resources—one that uses the watershed as a basis for decision-making. This chapter provides specific guidance to those various audiences—residents; agencies; local, state, and federal governments—on how best to implement the Plan’s recommendations and achieve the goals and objectives identified in Chapter 3.

8.2 Watershed Residents

Each of us can work to change a single portion of life’s events, and in the total of those acts will be written the history of this generation.

—Senator Robert F. Kennedy Jr.

When people begin to see themselves as an intrinsic part of the watershed, their collective actions can create tremendous change. The most relevant actions relate to water supply, water quality, habitat, and the application of social and political pressure to effect positive change. To make these actions become meaningful habits, start by becoming more connected to where you live.

Develop a ‘Sense of Place’: Start by changing your perception of the Southern California landscape. Re-establish a sense of place rooted in our Tujunga/Pacoima watershed and its natural systems: learn its geography; the particular value of its soils; the inherent beauty of this landscape, its seasons and colors; the butterflies, birds and other creatures that make this place their home. Become part of the watershed community.

- Read about the unique history of the watershed in the State of the Tujunga Report.
- Try to picture what your neighborhood looked like 250 years ago: the plants, the animals. ... What would you eat, where would you get your water, where would you build your home?
- Locate where you are in relation to the nearest wash or creek. Learn its name, its source and follow its current path up and downstream. Picture it in its natural state.
- Watch how water moves through your neighborhood in a rainstorm today.
- Spend the day at Hansen Dam.
- Take a hike up into the Angeles National Forest.
- Plant some native wild lilac, hummingbird sage, or wild rose near your windows. Inhale.

Conserve Water: To make the most of water supplies, residents should become mindful of their water use, making every effort to conserve water, both indoors and outside. Keep your ‘water footprint’ small. Remember, when you conserve water, you’re also conserving energy (19 percent of our total electrical energy and 33 percent of our gas energy costs are used to move and treat water around the state), protecting other ecosystems (water we take from the Sacramento Bay–Delta is degrading those ecosystems in the same way that water we took from the Owens Valley degraded those ecosystems), and saving money.

Indoors: Simple things can make a real difference:

- Fix leaky faucets.
- Turn the water off when brushing your teeth.
- Be more time-efficient in the shower—keep it under 5 minutes.
- Install aerators on faucets.
- Install low-flow toilets and showerheads.
- Fill the sink to hand wash dishes—don't leave the water running.
- Use a high water-efficiency clothes washer.*
- Run your clothes and dishwashers only when you have full loads.

* MWD can provide you with a rebate.

Outdoors: Landscape irrigation accounts for more than half of residential demand. Changing your outdoor water habits will result in significant savings on your water bill.

- Water your yard between dusk and 8am to reduce evaporation.
- Check your irrigation system for leaks, broken sprinkler heads, and overspray and replace old water wasting sprinkler heads with efficient rotating sprinkler heads.*
- Look into 'smart' irrigation controllers, which automatically make adjustments based on the time of year and the current weather.*
- Use a drip irrigation system instead of sprinklers to get water to plant roots more efficiently.
- Turn off sprinklers when late fall season rains arrive and only water during long periods between rain storms.
- Use a broom instead of a hose to clean your driveway and sidewalk.
- Wash your car on the lawn, using a bucket and biodegradable soap, or go to a car wash (most recycle their water).
- Use pool and spa covers.
- Install a greywater system to re-use sink and shower water for your landscape.
- Use mulch around trees, shrubs and other plantings to keep moisture in and weeds out.
- Get free mulch from the City of Los Angeles or make your own using yard clippings and kitchen waste like vegetable peelings, coffee grounds and eggshells.
- Don't overseed lawns with cool season rye grasses
- Keep turf grass to a minimum and use low-water using, warm season species like St. Augustine and buffalo grasses.
- Consider transitioning to a native or Mediterranean-based landscape.
- Replace lawn areas with synthetic turf,* reducing your water bill, eliminating the need for fertilizers or pesticides, and saving time as you'll never have to mow the lawn again.
- Call 1-800-DIAL-DWP to report water waste in the City of Los Angeles.

* MWD can provide you with a rebate.

Capturing Rainwater On-site: Each piece of property can function as its own little subwatershed, capturing, infiltrating and/or re-using every drop of water. Managing rainwater on-site adds to our local water supply, enhances flood protection, and lowers your water bill.

- Use a rain barrel to capture the rain coming off your roof and use it to irrigate your landscape.
- Apply a little landform grading to change your yards topography with swales, berms, and a rain garden to keep every drop on site.
- Make your driveway, walkways, and outdoor spaces as pervious as possible by using decomposed granite, gravel, porous pavers, or permeable concrete.
- Install a dry well or French drain at the end of your driveway.

Improving Water Quality: Changing a few everyday habits can keep trash, bacteria, pesticides, metals and oil from washing into and contaminating our streams and groundwater.

- Avoid chemical pesticides and fertilizers—use organic, non-toxic products sparingly.
- Sweep trash from your property into a dustpan and use yard trimmings for natural fertilizer and garden mulch.
- Clean up after your dog, cat or horse. Pet waste harms aquatic life by raising nitrogen levels, resulting in excessive algae growth; and increasing the amount of bacteria like *E. coli*.
- Help keep litter out of the streets and gutters. All our gutters empty into our waterways.
- Report full catch basins: LA City: (800) 974-9794, LA County: (800) 303-0003
- Dispose of paint, batteries, and other hazardous materials at the Tujunga/Pacoima watersheds permanent drop-off center (11025 Randall St., Sun Valley 91352, Sat. to Mon, 9:00 A.M. to 3:00 P.M.) or call (888)CleanLA for a schedule of household hazardous waste collection events near you.
- Recycle your used motor oil at gas stations, auto parts stores, and garages. Never pour it down the drain, in the gutter, or on the ground. Motor oil is extremely toxic.
- Maintain your car to keep it running efficiently. Leaking oil and spilled fuel, copper and asbestos from brake linings, and zinc from tires all contribute to water pollution.
- Look for opportunities to drive less: walk if it's a one mile round trip, bike if it's a little further, try public transit more often.
- Purchase environmentally sensitive products and services, and avoid over-packaged products
- Support your local farmers market
- Choose a dry cleaner that doesn't use perchlorethelyne.
- Say no to plastic bags. Get in the habit of bringing your own canvas or other reusable shopping bag with you to the store. Plastic bags create loads of unnecessary litter; they are easily blown by the wind, and often end up in the ocean. Plastic takes hundreds of years to biodegrade, and creates hazards for marine life and other wildlife
- Choose tap water over bottled water. Carry your own refillable water bottle. Bottled water costs approximately 28,000 times more than tap water, is less regulated for quality, and takes significant energy to bottle, transport, and even recycle.

Enhancing Habitat: Native plants need very little water, saving precious supplies for potable use. Native landscapes create habitat and protect our biodiversity. Biodiversity can both prevent, and enable recovery from, a variety of disasters. Biodiversity creates opportunities for medical discoveries.

- Replace your lawn with a combination of native or Mediterranean drought tolerant plants, fruit trees, and an edible garden. Save water, create a habitat for hummingbirds and butterflies, and help feed your family while improving your relationship to nature and its cycles.
- Visit your local native plant nursery, the Theodore Payne Foundation in Sun Valley, familiarize yourself with and learn more about the values of native plants. Join your local chapter of the California Native Plant Society.
- Don't plant invasive species like tree of heaven, ivy, vinca, ice plant, fountain grass, pampas grass and fennel.
- Encourage commercial nurseries to carry more indigenous native, and Mediterranean stock.
- Volunteer with the Forest Service to clean up trash from creeks or eradicate invasive species.

Applying Political and Social Pressure: Given the jurisdictional complexity of the watershed, change on the order of magnitude required will not be easy. But there's always a tipping point. Remember, your government representatives work for you, and an informed, engaged and vocal constituency is a powerful force.

Residents should demand that elected officials work in watershed-friendly ways to do the following:

- Recognize the importance of the Tujunga/Pacoima watershed to our local water supply.
- Restrict development in hillsides and historic floodplain areas.
- Expand the use of pervious surfaces throughout the watershed to enhance the capture, infiltration, and natural storage of water.
- Require that all new and re-development produce a net increase in park space.
- Expand and improve access to parks and open space.
- Expand public transit options and redefine the concept of a transit corridor.
- Create walkable, bikeable communities.
- Provide incentives for watershed-friendly residential landscapes.
- Enact a strong plastic bag ordinance.

8.3 Los Angeles City Neighborhood Councils

Significant social change comes from the bottom-up, from an aroused opinion that forces our ruling institutions to do the right thing.

—Senator Paul Wellstone

The City of Los Angeles has established Neighborhood Councils to provide input to planning decisions and these councils have an opportunity to shape the future of land use and development decisions. Members of these councils should do the following:

- Demand that developers incorporate low-impact development criteria in site development and design projects to include on-site stormwater capture, treatment, and infiltration.

- Demand that developers incorporate native and/or Mediterranean landscaping in projects.
- Encourage businesses to add trees to their parking lots.
- Work with the City to develop a more practicable definition of transit corridor.
- Actively encourage the City to include a Watershed Element in the General Plan that avoids development of greenfield sites or in sensitive habitat areas, limits development in historic floodways, establishes a long-term program to acquire land along floodways, requires on-site retention and infiltration of stormwater, focuses development along viable transportation corridors, and couples that development with the provision of new multi-purpose parks to meet higher standards of acreage per capita and access, especially in underserved neighborhoods.
- Participate in the revision of Community Plans that meet the above criteria.
- Support the reallocation of DWP profits, which are currently given over to the City's General Fund, to a new program that invests in sustainable water supply and energy infrastructure.
- Look for opportunities to create pocket parks and community gardens in your Council area.
- Participate in the Tujunga/Pacoima Watershed Group to oversee plan implementation.

8.4 *City of Los Angeles*

It would be disastrous if bad planning policy meant that today's new developments become tomorrow's climate slums.

—*Tim Yeo*

The City of Los Angeles should do the following:

- Acknowledge that the long-range vision and projects identified in the Los Angeles River Revitalization Master Plan (LARRMP) cannot be accomplished without the watershed-wide approach to land use and stormwater management exemplified by this Plan. As the largest subwatershed of the Los Angeles River, restoration of the Tujunga/Pacoima watershed will have a major impact on stormwater management and groundwater recharge, increasing water supplies and reducing dependence on imported water. The stakeholder-identified goals, objectives, policy recommendations, and projects in this plan should guide future land use and development initiatives for those areas outside the relatively narrow corridor considered in the LARRMP.
- Declare a drought.
- Revise the general plan to include a new watershed element that avoids development of greenfield sites or in sensitive habitat areas, limits development in historic floodways, establishes a long-term program to acquire land along floodways, requires on-site retention and infiltration of stormwater, focuses development along viable transportation corridors, and couples that development with the provision of new multi-purpose parks to meet higher standards of acreage per capita and access, especially in underserved neighborhoods.
- Revise Community Plans to meet the above criteria.
- Work with Neighborhood Councils to develop a more practicable definition of transit corridors.
- Review and revise building and planning codes to (1) include a new Stream Protection Ordinance that limits development along natural stream courses, (2) require on-site retention of stormwater to the maximum extent feasible, (3) encourage infiltration and/or storage and reuse of stormwater for

irrigation, (4) encourage a range of water conservation measures and reduce irrigation water demand, and (5) incentivize the use of native and other climate-appropriate plants on private property.

- Participate in the development of a regional open space plan that establishes an integrated strategy with acreage targets, location criteria, timelines, and funding mechanisms and aggressively pursue creation of multiple-objective parks that balance recreation and habitat uses, detain, cleanse, and infiltrate stormwater, and reduce peak flood flows when feasible.
- Participate in the development of a new comprehensive flood management plan for the watershed.
- Support the reallocation of DWP profits, which are currently given over to the City's General Fund, to a new program that invests in sustainable water supply and energy infrastructure.
- Prohibit the sale of surplus properties in the watershed and prioritize their use as multi-benefit projects that include the capture and infiltration of stormwater.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.
- Implement the Integrated Resources Program for expanded use of recycled water and related Go-Policy Directions.
- Complete the study (with the County of Los Angeles) of groundwater recharge enhancement in the San Fernando Valley and implement all feasible recommendations.
- Mandate the use of recycled water in all public projects and incentive use in private projects.
- Mandate the use of native landscaping and smart irrigation controllers for all public facilities.

8.5 City of San Fernando

If you cannot do great things, do small things in a great way.

—Napoleon Hill

The City of San Fernando should do the following:

- Declare a drought.
- Revise general plan policies to include a new watershed element that avoids development of greenfield sites or in sensitive habitat areas, limits development in historic floodways, establishes a long-term program to acquire land along floodways, requires on-site retention and infiltration of stormwater, focuses development along viable transportation corridors, and couples that development with the provision of new multi-purpose parks to meet higher standards of acreage per capita and access, especially in underserved neighborhoods.
- Review and revise building and planning codes to (1) require on-site retention of stormwater to the maximum extent feasible, (2) encourage infiltration and/or storage and reuse of stormwater for irrigation, (3) encourage a range of water conservation measures and reduce irrigation water demand, and (4) incentivize the use of native and other climate-appropriate plants on private property.
- Participate in the development of a regional open space plan that establishes an integrated strategy with acreage targets, location criteria, timelines, and funding mechanisms and aggressively pursue creation of multiple-objective parks that balance recreation and habitat uses, detain, cleanse, and infiltrate stormwater, and reduce peak flood flows when feasible.

- Participate in the development of a new comprehensive flood management plan for the watershed.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.
- Mandate use of recycled water in all public projects and incentive use in private projects.
- Mandate the use of native landscaping and smart irrigation controllers for all public facilities.

8.6 County of Los Angeles

The majority of men meet with failure because of their lack of persistence in creating new plans to take the place of those which fail.

—Napoleon Hill

The County of Los Angeles should do the following:

- Work with the state legislature to reconstitute the Flood Control District as a Watershed Management District with a mission statement and organizational structure that provides more equal emphasis to watershed management, water conservation, and flood management.
- Revise general plan policies to avoid development of greenfield sites or in sensitive habitat areas, establish a long-term program to acquire land along floodways, require on-site retention and infiltration of stormwater, focus development along viable transportation corridors, and promote creation of new multi-purpose parks, especially in underserved neighborhoods.
- Review and revise building and planning codes to (1) require on-site retention of stormwater to the maximum extent feasible, (2) encourage infiltration and/or storage and reuse of stormwater for irrigation, (3) encourage a range of water conservation measures and reduce irrigation water demand, and (4) incentivize the use of native and other climate-appropriate plants on private property.
- Participate in the development of a regional open space plan that establishes an integrated strategy with acreage targets, location criteria, timelines, and funding mechanisms and aggressively pursue creation of multiple-objective parks that balance recreation and habitat uses, detain, cleanse, and infiltrate stormwater, and reduce peak flood flows when feasible.
- Participate in the development of a new comprehensive flood management plan for the watershed.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.
- Develop criteria for incorporation of native vegetation of different species and sizes within streambeds and floodplains.
- Complete the study (with the City of Los Angeles) of groundwater recharge enhancement in the San Fernando Valley and implement all feasible recommendations.
- Mandate use of recycled water in all public projects and incentive use in private projects.
- Mandate the use of native landscaping and smart irrigation controllers for all public facilities.
- Develop and launch a public outreach and education campaign to build understanding of, and support for maintenance of green infrastructure.
- Implement the proposal for a ballot measure to bring a funding plan for a multi-purpose watershed infrastructure program to the voters.

8.7 Los Angeles Unified School District

Human history is a race between education and catastrophe.

—H G Wells

The LAUSD should do the following:

- Work with the City of Los Angeles and DWP to update their sustainability guidelines to include capture, infiltration and/or reuse of stormwater on-site, and develop joint-use agreements for community access to recreation facilities.
- Support use of the Educators Guide to the Tujunga/Pacoima Watershed in all schools in the watershed.

8.8 Southern California Association of Governments

Can you think of anything that can get better if we crowd more people into our cities, our towns, into our state our nation or on this earth?

—Dr Albert Bartlett

SCAG should do the following:

- Incorporate the work of the Local Government Commissions Ahwahnee Water Principles into their work on the Compass Growth Project.

8.9 State of California

Unless commitment is made, there are only promises and hopes; but no plans.

—Peter F. Drucker

The Los Angeles Regional Water Quality Control Board should do the following:

- Coordinate development of a suite of TMDL regulations to foster integrated action, which should incorporate stakeholder-led processes such as CREST.
- Revise future stormwater permits to encourage integrated actions to enhance stormwater quality.
- Exercise the intent of the RWQCB 2005-002 Hydromodification resolution to maintain the functional integrity of all remaining natural watercourses.
- Support community-based monitoring programs to expand the collection and analysis of water quality data.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.

Caltrans should do the following:

- Utilize smart irrigation controllers and native landscaping in all freeway easements and other public rights of way.

The Coastal Conservancy should do the following:

- Lead the effort to develop a regional open space plan that establishes an integrated strategy with acreage targets, location criteria, timelines, and funding mechanisms.

The Rivers and Mountains Conservancy should do the following:

- Partner with the U.S. Forest Service to fund invasive species management efforts in the upper watershed.

The Mountains Recreation Conservation Association should do the following:

- Utilize bond funds to support development of greenway projects specified in this plan.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.

The Department of Water Resources should do the following:

- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.

The Department of Conservation should do the following:

- Provide financial and technical support to the development of a Tujunga/Pacoima Watershed Committee to oversee plan implementation.
- Fund the development of a Tujunga/Pacoima Watershed Guide to Land Use Planning for Los Angeles City Neighborhood Councils to build capacity for residents to participate effectively in fostering watershed-friendly land-use practices and design features.

8.10 Federal Government

But while nature has considerable resilience, there is a limit to how far that resilience can be stretched. No one knows how close to the limit we are getting. The darker it gets, the faster we're driving.

—*Douglas Adams*

The U.S. Army Corps of Engineers should do the following:

- Lead development of a new comprehensive flood management plan for the watershed that includes (1) changes in the configuration, operation, and maintenance of existing flood facilities; (2) naturalized stream channels that enhance infiltration, create habitat, and provide recreational opportunities; (3) a sediment management strategy that preserves the natural assimilative capacity of streams; (4) new multiple-purpose sites along the floodways of the Tujunga and Pacoima washes that provide habitat, recreation, and stormwater management; (5) new stormwater detention and infiltration facilities on publicly-owned sites; and (6) on-site stormwater infiltration on residential and commercial properties.
- Implement the projects identified in their Tujunga Wash Feasibility Study.
- Complete development of and adopt a definition of Waters of the United States specifically applicable to Southwestern streams.
- Support the continuation of, participate in, and provide technical support to the Tujunga/Pacoima Watershed Group to oversee plan implementation.

The U.S. Environmental Protection Agency should do the following:

- Increase funding for and expedite the cleanup of the San Fernando Groundwater Basin.

8.11 Conclusion

You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

—*Buckminster Fuller*

With distant water supplies becoming scarce and much of the San Fernando Valley facing the potential of widespread redevelopment, we must change our approach to land use, water supply, and flood management in ways that respect the intrinsic connections between the built and natural environment.

The Tujunga/Pacoima watershed is unique within the City of Los Angeles for its innate ability to capture and store water in its capacious underground reservoir. The practical and economic costs of continuing to develop with a twentieth century template and invest in traditional water supply infrastructure can no longer be justified. Undertaking a watershed approach that invests in green infrastructure and capitalizes on our inherent assets can yield green jobs, improved public health, a sustainable water supply future, and widespread neighborhood improvements.

Making this transition will require a fundamental paradigm shift that demands collective cooperation and persistent effort. Making these changes will not be easy—individual habits and perceptions die hard, and institutions are change averse entities. But failure to act will leave our neighborhoods and communities in peril from the affects of climate change and the possibilities of urban decline.

The first step in developing a viable plan for change is finding common ground: bringing diverse people together to collaborate and create a consensus vision, a mutually supportive set of goals, and a holistic, proactive approach. This watershed plan has accomplished that task.

Now we must commit to work cooperatively and purposefully to implement the specific actions of this plan and continue to create and undertake new ones. It is up to us all to reclaim and maintain the healthy rivers and streams, sufficient parks and open spaces, protected hillsides and floodplains that are integral to our social and economic health.

Make no little plans; they have no magic to stir people's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that your children and grandchildren are going to do things that would stagger us. Let your watchword be order and your beacon beauty.

—*Daniel H. Burnham*