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14 June 2009

Christopher Williamson, Senior Planner
Planning Division
City of Oxnard
214 S. C Street
Oxnard, CA 93030

Subject: Comments on the Oxnard Draft 2030 General Plan

Dear Mr. Williamson:

David Magney Environmental Consulting (DMEC) has been retained by the Environmental Defense Center to review and comment on the City of Oxnard's 2030 General Plan (GP2030) on behalf of the Environmental Defense Center, the Sierra Club, Los Padres Chapter, and the Environmental Coalition of Ventura County. This letter provides comments on the Draft GP2030, dated February 2009. DMEC's comments will focus primarily on biological resource issues addressed, or not adequately addressed in the Draft GP2030.

DMEC has been in business since July 1997, specializing in biological resource assessments, CEQA, and wetlands (including delineation, impact assessment, and mitigation planning). DMEC is owned by Mr. David L. Magney, who is a biologist and geographer, specializing in botanical resources and wetlands. Mr. Magney has been consulting full time since 1985, working for Dames & Moore, Jones & Stokes Associates, Fugro West, Inc., and ENSR before establishing DMEC. Mr. Magney is considered an expert on the flora of Ventura County, and has been "certified" as a qualified biologist by Ventura County Planning Division, Los Angeles County Regional Planning (SEATAC), and Santa Barbara County. He serves on the Los Angeles County Environmental Review Board. Mr. Magney's CV is attached. Mr. Magney grew up in Oxnard, living in Hollywood Beach, Silver Strand, Bryce Canyon North, and Sierra Linda neighborhoods until the late 1970s.

This letter provides comments regarding the adequacy of the General Plan (GP) to protect biological resources present within the City of Oxnard and its Sphere of Influence and Planning Area of Interest. The policies in the Open Space and Conservation Elements of a GP are important as the most important tool, in protecting biological resources. Once land within the City's jurisdiction is zoned, projects proposed according to current zoning may not receive discretionary review, and any sensitive biological resources present could be entirely eliminated from the project site without any mitigation. It is for this reason that the impact of the City's GP is of extreme importance.

The issues of concern are summarized below, followed by more detailed analysis and comments organized by specific resource issue or area. The relevant GP2030 objectives that will be addressed in this comment letter include:

- Provide options for more appropriate land use – such as infill or mixed use development;
- Protect existing land uses from incompatible development; and
- Address recent environmental issues such as green house gases, long-term water supply and conservation, and alternative energy sources.

The goals and policies within the GP that are provided as ER-1 through ER-4 are good because they articulate some of the City's values and encourage protection of biological resources. However, the goals should be rewritten as full sentences so that the City's intent can be understood. Currently the goals are simply subject headers, but the policies should be unambiguously identified as policies so that the City's intention is clear. For example, ER-1.1 should be titled "Policy ER-1.1", with the rest of the language quite good and clear. Recommendations and comments on each of the GP2030 goals and policies are provided below.

While this letter is quite critical of the GP2030, it recognizes the importance of the GP, arguably the most important document, in determining how the City of Oxnard can be a truly sustainable community while protecting its natural resources.

SUMMARY OF ISSUES OF CONCERN

A summary of the issues of concern related to biological resources include:

- Inadequate protection policies
- Unenforceable resource protection policy language
- Lack of adequate description of baseline conditions
- Failure to use best available data on resources present in planning area
- Failure to identify all the sensitive resources known to occur in Oxnard
- Lack of natural open space parks in most city neighborhoods
- Failure to recognize and promote benefits of natural open space throughout city
- Lack of adequate protection of Ormond Beach wetland and adjacent upland habitats.

Three elements of the GP, the Land Use Element, the Open Space Element, and the Conservation Element, are the primary components of the GP that contain, or should contain, goals, objectives, and policies to protect biological resources within the City's jurisdiction. Comments on the draft GP2030 DEIR have been provided under separate cover, dated 22 May 2009.

General Plan Goals

As stated in the GP2030, the GP is the tool by which decisionmakers are to make land use decisions. The vision for the City is by what the GP goals must strive to attain. The basic theme of the visions include one focused on establishing a Sustainable Community (Section 2.1, Page 2-1), reflect the city's unique coastal location and agricultural history (Section 3.1, Page 3-1), ensure infrastructure and community services keep pace with public needs (Section 4.1, Page 4.1), and that the City increases its responsible stewardship of the environment in full compliance with state and Federal laws, and strives to exceed [sic] in a position of leadership in these areas (Section 5.1, Page 5.1). The vision(s) is(are) set down through the adoption of specific goals supported by detailed policies. Some policies are then supported or implemented through ordinances. Land use decisions cannot conflict with adopted GP policies, without formal amendment to the GP, which requires full CEQA (California Environmental Quality Act) review each time the GP is revised. For this reason, GPs are not often amended. This requires that a great deal of care and thought to go into the development of a GP, as it is supposed to be a long-term guiding document.

The city's visions GP2030 are not always clearly stated, and are confusing. There should be one basic vision, not one for each group of GP elements. The vision should distill what the citizens of Oxnard want the city to be like or become by 2030. As presented, there is no clear vision for the city articulated in the GP2030. The GP can be compared directly with a strategic plan, the process and methods being almost identical. The GP2030 is not a clear plan.

The GP is divided into elements, with two generally addressing biological resources within and adjacent to the area to be covered by the GP, the Open Space Element and the Conservation Element. The Open Space Element is supposed to describe "measures for the preservation of open space for the protection of natural resources…". The Conservation Element is supposed to address "the conservation, development, and use of natural resources". (Page 1-5 of the GP2030.)

The GP2030 does not follow the typical naming of the Open Space and Conservation Elements; rather, the Infrastructure and Community Services chapter (Chapter 4) addresses Open Space and the Environmental Resources chapter (Chapter 5) addresses the conservation of biological resources. However, confusion is created immediately on Table 1-1, a crosswalk table from required elements and the 2020 and 2030 GPs, where Open Space and Conservation are stated to be addressed in Chapter 5 of the GP2030.

Since this comment letter is focused on open space and biological resource issues, only those goals and policies addressing them are examined and discussed below, and include:

- Goal *SC-2, Ensure that rising sea level is considered relative to coastal communities and properties.*
- Goal *CD-1, A balanced community consisting of residential, commercial, and employment uses consistent with the character, capacity, and vision of the City.*
- Goal *CD-3.4, Neighborhood Quality of Life*
- Goal *CD-10, Neighborhoods and villages with a distinct sense of place.*
- Goal *ICS-19,* Law Enforcement, *adequate and effective law enforcement and the incorporation of crime prevention features in developments.*
- Goal *ICS-23,* Parks and Recreation, *a full range of recreational facilities and services accessible to all Oxnard residents, workers, and visitors.*
- Goal *ICS-26,* Recreation Programs, *recreational programs that meet Oxnard's diverse needs.*
- Goal *ER-1, Protected natural and cultural resources, agriculture, and open spaces.*
- Goal *ER-2, Maintenance and enhancement of natural resources and open space.*
- Goal *ER-3, Protected, restored, and enhanced [sic] of water-related Habitats and their associated plant and wildlife species.*
- Goal *ER-4,* Sensitive Habitat, *Protected, restored, and enhanced sensitive habitats.*
- Goal *ER-6,* Aesthetic Resources, *attractive new development with community and private open space and identity.*
- Goal *ER-7,* Scenic Resources, *protected and enhanced natural setting and scenic resources.*
- Goal *ER-9,* Coastal Resources, *protected coastal resources as a significant landscape feature to be experiences by residents and visitors.*

- Goal *ER-11*, Landscaping, *enhanced landscape quality with an emphasis on landscape practices, management and plant species that are appropriate to Oxnard and its coastal climate.*
- Goal *ER-15*, Protect Agriculture, *agricultural lands protected from urbanization.*

Each of these goals and their supporting policies are discussed in detail below, with the goal to improve the clarity and completeness of each goal.

Sustainable Community Goals and Policies

The vision of the Sustainable Community "Element" of the GP is to have a community that results in living with nature. The vision talks about the need for the City to be more in tune with the environment of the Oxnard Plain and how changes in the environment, including sea level rise and global warming, need to be considered in short-term and long-term land use decisions. Page 2.2 of the GP2030 states that to have a sustainable community the citizens and decisionmakers must think about the "big picture". Five goals and 24 policies are proposed to develop a sustainable community. One proposed goal is discussed below.

Goal *SC-2, Ensure that rising sea level is considered relative to coastal communities and properties*, under the heading, "Sea Level Rise Awareness and Planning", includes three policies, SC-2.1 through SC-2.3, which are supposed to "ensure" that the fact that sea level is rising will be considered as it relates to coastal communities and properties.

Policy SC-2.1: Sea-Level Rise and Local Coastal Program, states, "Include best-available information regarding possible sea-level rise in the next revision of the Local Coastal Program, which should be initiated within two years". This policy is superfluous, as best available information should ALWAYS be used for any assessment or land use decision. The fact is that sea level IS rising and coastal properties WILL be affected, the scientists just don't exactly by how much and by what date. The ramifications of a rising sea level needs to be instilled in a policy, such as, all properties within the zone of impact from sea level rise will be rezoned to open space, resource conservation, or similar land use zoning. The City of Oxnard does not have the financial resources to adequately protect all, or even a major portion, of the properties that will be inundated or impacted by a significant rise in sea level, such as the conservative projection of 2 meters.

While most developed properties within the city are on land higher than 6 meters, few properties that are developed will be inundated by a rise in sea level by 6 meters; however, infrastructure serving those properties will be. Most of the properties at or lower than 6 meters are open space containing or mostly natural habitats, and most of those are rare wetland habitats. These habitats would naturally migrate inland as sea level rises; however, due to past and present land use zoning and decisions, higher ground is not available to such a migration. The largest natural open space area in Oxnard that is at great risk from a rise in sea level is Ormond Beach. The proposed land use plan for the Ormond Beach neighborhood would put the higher elevation parcels into industrial and urban uses. Development of these parcels, currently either open space or agriculture, would preclude migration of the coastal habitats at Ormond Beach inland as sea level rises.

Monitoring sea level rise, as proposed by Policy SC-2.2, Monitoring Systems, does nothing to accommodate sea level rise, only recommending "consider"ing a monitoring system, without any if-then actions to implement. The GP needs to zone properties appropriately, taking into consideration the known or expected changes in the near long-term (20 to 100 years).

Policy SC-2.3, Coastal Preparation, goes the furthest in addressing the impacts to a rising sea level; however, it only requires "consideration" of this issue for new developments, and ignores existing developments, which will require future government actions, including building permits to rebuild or protect, in the short term, properties from flooding, erosion, and liquefaction as the soils become saturated.

Ormond Beach wetland and upland habitats are at risk from any significant rise in sea level. At least seven listed species occur at Ormond Beach: California Least Tern (*Sternula antillarum browni*), Western Snowy Plover (*Charadrius alexandrinus nivorsus*), California Brown Pelican (*Pelecanus occidentalis californicus*), Saltmarsh Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*), Southern California Saltmarsh Shrew (*Sorex ornatus salicornicus*), Saltmarsh Harvest Mouse (), Tidewater Goby (*Eucyclogobius newberryi*), and Saltmarsh Bird's Beak (*Cordylanthus maritimus* ssp. *maritimus*), plus many other special-status species that are not yet formally listed. All of these species are at risk of local extinction if Ormond Beach habitats are inundated by sea level rise without a place for those habitats to migrate to.

The GP should include policies that fully protect these habitats as they exist now, and how they would naturally exist with a significant rise in sea level. Otherwise, the City is ignoring the issue and postponing the tough decisions to future decisionmakers, when the decisions will be more difficult and more expensive than they are now.

Balanced Community Goals and Policies

The Balanced Community goal, Goal *CD-1: A balanced community consisting of residential, commercial, and employment uses consistent with the character, capacity, and vision of the City*, is supported by 12 policies, of which three policies focus on the resident's quality of life, which is directly and indirectly to the condition of natural biological resources.

Policy CD-1.6 Public Facilities, states, "Enhance resident quality of life by providing adequate space for schools, libraries, parks and recreation areas, as well as space for the expansion of public facilities to support the community's vision". Next, CD-1.8 Natural Resource Conservation: "Promote a high quality of life with the community, incorporating retention of natural open space areas, greenbelts, and the provision of adequate recreational facilities". These are excellent policies; however, the GP does not adequately recognize the importance of natural open space areas as part of the City's parks system. The City needs to have natural wildlands throughout the city to provide experiences for children and adults to experience and interact with a natural environment that is NOT controlled by humans. Currently, there is a lack of natural open space areas readily accessible by the public, as they are located on the periphery of the City, with the majority located on private property.

Numerous studies (e.g. Lang 2002[1], Gill 2008[2], van den Berg 2007[3]) have shown that ready access to natural open space areas is extremely important to the mental and physical health of children, and to maintenance of health for adults (Louv 2006[4]).

[1] Lang, Susan S. 2002. Green Spaces Boost Children's Attention. *Human Ecology* 30(1):1-23.

[2] Gill, Tim. 2008. Space-oriented Children's Policy: Creating Child-friendly Communities to Improve Children's Well-being. *Children & Society* 22:136-142.

[3] van den Berg, A.E., T. Hartig, and H. Staats. 2007. Preference for Nature in Urbanized Societies: Stress, Restoration, and the Pursuit of Sustainability. *Journal of Social Issues* 63(1):79-96.

[4] Louv, Richard. 2006. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Algonquin Books of Chapel Hill, Chapel Hill, North Carolina.

The Neighborhoods Map on Page 3-11 incorrectly includes the community of Hollywood Beach as part of Hollywood-By-The-Sea. They are separate but adjacent communities. Most of Hollywood-By-The-Sea was destroyed when Channel Islands Harbor was created. None of these neighborhoods occur within the City of Oxnard, except that portion that is now Channel Islands Harbor. The map should be corrected to show where Hollywood Beach occurs.

Policy CD-3.4, Neighborhood Quality of Life policy needs to be expanded to include/incorporate the needs of natural open spaces areas as a necessary component of maintaining and improving the quality of life within the City's neighborhoods. Each neighborhood within the City needs to provide natural open space areas for children (Lang 2002, Elsley 2004[5], Louv 2006, Gill 2008) and adults (van den Berg 2007), to explore and interact with nature in an unstructured manner. This is currently not the case in most Oxnard neighborhoods. The only parks within the city that have any natural open space are:

- Mandalay County Park (next to Oxnard Shores and Oxnard Dunes),
- Oxnard State Beach (next to Oxnard Shores and Hollywood Beach), and
- Richard Bard Bubbling Springs Park (next to Pleasant Valley Village but actually in the City of Port Hueneme).

All other parks within or immediately adjacent to the City of Oxnard that include natural open space are more than a mile away from any residential area. Most natural open space areas in Oxnard are on private property, such as along the Santa Clara River, in Ormond Beach, or Mandalay Beach (e.g. SCE property). The proposed natural area within the permitted, yet un-built, North Shore at Mandalay Bay development will be off-limits to the public as its primary purpose will be to protect the endangered Ventura Marsh Milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*).

The only park along the Santa Clara River, which has many acres of natural open space, is the River Ridge Golf Club. However, as the largest "park" in the City, it provides no opportunities for natural environment experiences to the general public, and children in particular. In fact, access is strictly controlled, and only those persons with the financial resources and interest in the game of golf can have any experiences communing with nature at this "park".

While the Oxnard Shores neighborhood is relatively rich with natural open space, the remaining city neighborhoods that contain the majority of the population, lack any natural open space. Even vacant lots can be restored to natural habitats, which will meet some of the qualities and benefits of natural areas to children and adults (Louv 2006). The GP2030 should include a goal to provide natural open space "parks" in each neighborhood, or at least in close proximity to them.

Since most of the natural habitats within the City have been destroyed and converted to urban or agricultural uses, the remaining natural areas occur along the periphery of the city. However, there are numerous vacant lots that now only contain ruderal vegetation at most, or unused and dilapidated structures. These represent opportunities for restoration with natural vegetation that can provide some qualities of the natural environment that can be used to meet the needs of children and adults who wish to experience the natural environment, even if it is in a small way. Using required facilities, such as floodwater detention basins, for multiple purposes can maximize their utility. Floodwater detention basins can be vegetated with native plants, which provide habitat for a wide variety of wildlife species, and opportunities for children to experience the natural environment. It is well understood that children gravitate to such places, and gain important experiences by having such places available to them, in their neighborhood (Louv 2006). Including small natural area parks in each neighborhood fits into Policy CD-

[5] Elsley, Susan. 2004. Children's Experience of Public Space. *Children & Society* 18(2):155-164.

3.4 Neighborhood Quality of Life: "Provide adequate parking, rehabilitation measures, lighting, and programs such as neighborhood and alley clean-ups to ensure conservation of neighborhoods".

Policy *CD-7.11 Village Open Space Areas/Parks* and *CD-7.13 Village Trail and Open Space Connections* also fit into this concept and supports the need to provide natural open space areas within walking distance from neighborhoods.

The Sense of Place Goal (*CD-10 – Neighborhoods and villages with a distinct sense of place*) should incorporate the concept of how the neighborhood fits into, or is a part of, the natural environment, on a broader scale by providing opportunities to interact with nature on a more personal, local level. What grows here? What lives here?

On a very basic level, humans develop a sense of place, of community, when they have the opportunity to actually have contact, physically, socially, intellectually, and emotionally, with their community environment. As discussed above, and in the next section, humans need to directly experience and see the natural environment, and that can be achieved through landscaping and having ready access to natural open space parks in their neighborhood.

Parks and Recreation Goals and Policies

Goal ICS-23, *A full range of recreational facilities and services accessible to all Oxnard residents, workers, and visitors*. Policy ICS-23.1 City Park and Recreation Standards, "Provide park and recreation facilities at a level that meets the standards for neighborhood and community parks as follows:

Type of Park	Net Acres/ 1,000 Residents	Min. Net Acres/Park	Service Radius
Mini/Pocket	No standard	No standard	⅓ mile
Neighborhood	1.5	5	½ - 1 mile
Community	1.5	20	1.5 miles
Total	3.0		

Policy ICS-23.3: Identify Additional Parklands, states, "Prior to incorporation of residential projects or areas into the City, assess the need for additional parkland". As discussed above and below, there is definitely a need for additional parklands, primarily in the form of natural open space. As discussed in greater detail below, existing drainages used solely for flood water conveyance, represents excellent opportunities for additional, natural open space parks without requiring large tracks of land.

Below is a table, modified from the table under Recreation of the Oxnard General Plan Update (2006) (2030 General Plan Alternatives, Page 3), which illustrates the lack of natural open space within the City's parks system.

Type of Park	Number	Acreage Covered	Natural Open Space Acreage
Mini/Pocket	4	4.0	0
Neighborhood	32	210.8	0
Community	7	221.5	0
Special Purpose Facilities	6	445.4	0?
Total	57	881.7	

What is also misleading about the types of parks within the city (as listed in the table above and on Page 3 of the 2030 General Plan Alternatives), 12 of the 32 neighborhood parks tallied above are focused on sports activities, with only 20 of them offering any opportunities for unorganized, personal, quiet play, or contemplation. Furthermore, the City's document does not provide a list of the park facilities it includes, and the tally is in question. DMEC can only find a total of 36 named parks within the City, using Google Earth and GIS data obtained from Ventura County Planning Division's GIS database.

Table 1, Parks of Oxnard, was compiled by DMEC as a result of digitizing all the named parks within the Oxnard City Limits. DMEC used GIS software with September 2007 high-resolution color aerial photography to determine the actual area, and locations, of park facilities. Figure 1, Map of Oxnard Parks and Drainages[6], illustrates the locations and types of parks distributed within the city. With the parks color coded as to type of park, it becomes very clear that several neighborhoods are seriously underserved by park facilities, and that most of the parks are sports-centric, basically only meeting one of the needs of neighborhood/city residents.

Table 1. Parks of Oxnard

Type of Park	Number	Acreage Covered	Natural Open Space Acreage
Commons	1[7]	1.1	0
Neighborhood	17	125.4	0
Sports	10	82.5	0
Community	2	18.8	0
Special Purpose Facilities	4	91.6	0
Golf Courses	1	363.1[8]	0
Natural Open Space	3	477.2[9]	477.2
Total	36[10]	1,159.8	477.2

[6] A better quality version of this map is available on DMEC's website (http://www.magney.org/files/Oxnard.htm).

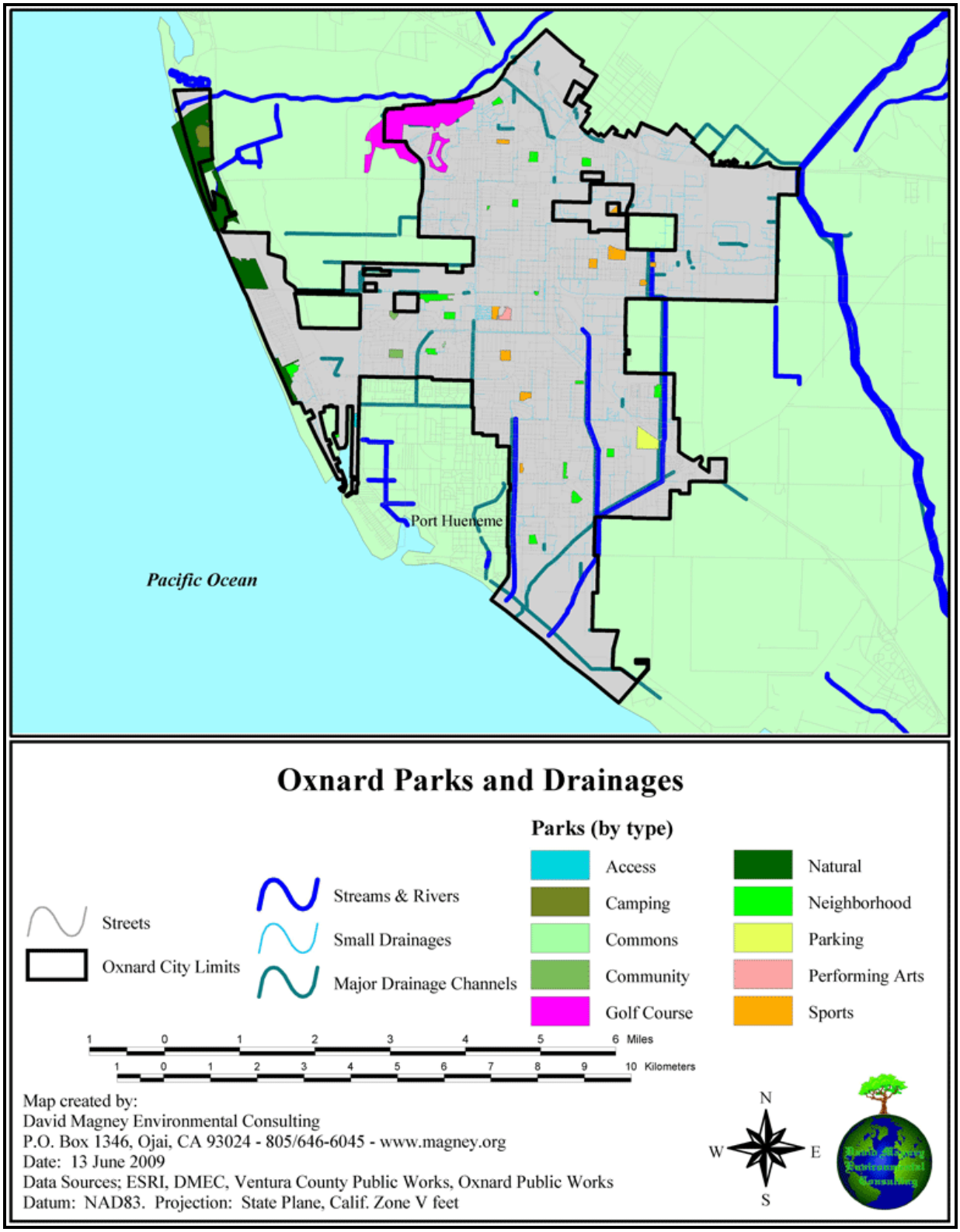
[7] The Commons "park" included here represents a common landscaped "park" area within a private neighborhood, which serves the same purpose of a landscaped neighborhood park, except that it is not available to the general Oxnard citizen.

[8] Approximately 102 acres of the golf course is actually outside the city limits.

[9] Approximately 135 acres of McGrath State Beach is actually outside the city limits.

[10] There are actually only 37 named parks within the Oxnard City Limits; however, for this assessment, two parks (McGrath State Beach and Oxnard State Beach) were subdivided to separate out natural and manmade portions.

Figure 1. Map of Oxnard Parks and Drainages



Urban parks are important in providing habitat connectivity and ecological health (Chiesura 2004[11]), depending on their nature and position in the urban environment, and are important components of maintaining a sustainable city (Andersson 2006[12]). Adults living in urban environments require, need, and want contact with nature to reduce stress (van den Berg et al. 2007[13]).

Policy ICS-23.1 lacks any mention of natural open space parks. As shown by numerous studies mentioned elsewhere in this letter, the need for such parks to maintain mental health and well-being of Oxnard residents is strong, yet no provision in the GP has been given to ensure that such places are provided to Oxnard citizens. In fact, there are only two parks within the city, excluding McGrath State Beach Park, which is only technically within the city limits, are entirely or partially natural open space, Mandalay Beach Park and Oxnard Beach State Beach. Not one of the parks elsewhere in the city have natural open space within them or adjacent to them[14].

As changes in environmental conditions occur, providing natural open space parks in each neighborhood also provides habitat for native plant and wildlife species, which is extremely important to accommodate natural migration. Many species do not require adjacent and contiguous habitats, but can access them if other areas of suitable habitat are within sufficient distance. This minimum distance needed varies between species and site conditions.

The existing drainage system, with significant modification, represents an excellent opportunity to meet at least two objectives/goals: provide interconnecting habitat for plants and wildlife and provide natural open space (linear) parks for children (and adults) to explore and experience nature. A tremendous amount of taxpayer dollars are spent in building and maintaining the flood drainage system in Oxnard, which serves only one function, floodwater conveyance. However, drainages (in their natural form, i.e. streams) perform numerous functions that are lost or prohibited by the single-minded engineered solution to flood control.

The U.S. Army Corps of Engineers (Corps), in collaboration with other federal agencies (e.g. U.S. Fish and Wildlife Service, Environmental Protection Agency, Natural Resources Conservation Service [formerly known as the Soil Conservation Service]) has developed holistic models to capture and measure the functions wetlands perform, fourteen of them for riverine/palustrine systems (i.e. rivers and streams). This model is generically called the Hydrogeomorphic Assessment Method [HGM] (Smith et al. 1995[15]). Two regional models have been developed for southern California rivers and streams (Lee et al. 1997[16], Lee et al. 2001[17]), which have been used locally by DMEC on a variety of projects (DMEC 1998[18], 2000[19], 2001[20],

[11] Chiesura, Anna. 2004. The Role of Urban Parks for the Sustainable City. *Landscape and Urban Planning* 68(1):129-138.

[12] Andersson, Erik. 2006. Urban Landscapes and Sustainable Cities. *Ecology & Society* 11(1):34.

[13] van den Berg, A.E., T. Hartig, and H. Staats. 2007. Preference for Nature in Urbanized Societies: Stress, Restoration, and the Pursuit of Sustainability. *Journal of Social Issues* 63(1):79-96.

[14] The River Ridge Golf Course, a private, special-focus park with high entrance fees, is located along the south bank of the Santa Clara River, which represents natural open space habitat.

[15] Smith, R.D., A. Ammann, C. Bartoldus, and M.M. Brinson. 1995. An Approach for Assessing Wetland Functions Using Hydrogeomorphic Classification, Reference Wetlands, and Functional Indices. (Wetlands Research Program Technical Report WRP DE.) Waterways Experiment Station, U.S. Army Corps of Engineers, Vicksburg, Mississippi.

[16] Lee, L.C., M.C. Rains, J.A. Mason, and W.J. Kleindl. 1997. Guidebook to Hydrogeomorphic Functional Assessment of Riverine Waters/Wetlands in the Santa Margarita Watershed. Peer review draft. February. The National Wetland Science Training Cooperative, Seattle, Washington. Prepared for U.S. Environmental Protection Agency, Region IX, San Francisco, California.

[17] Lee, L.C., P.L. Fiedler, S.R. Stewart, R.R. Curry, D.J. Partridge, J.A. Mason, I.M. Inlander, R.B. Almay, D.L. Aston, and M.E. Spencer. 2001. *Draft Guidebook for Reference Based Assessment of the Functions of Riverine Waters/Wetlands Ecosystems in the South Coast Region of Santa Barbara County, California*. Santa Barbara County Water Agency, Santa Barbara, California.

2004[21], 2006[22], 2008[23]) for impact assessment and habitat restoration planning purposes. The HGM models are very useful tools that the City can use, or require to be used through GP policy, to evaluate the benefits of upgrading many of the existing single-use drainages into multi-functional assets, including providing habitats and habitat connectivity and natural open space parks.

The long-term benefits of restoring or converting flood drainages to natural creeks and linear natural parks far out-weights the costs, many of which are hidden or not appropriately considered when constructing or maintaining concrete-lined flood channels. Using the multiple functions natural streams provide will result in long-term savings and benefits to taxpayers (locally, regionally, statewide, and nationally) and fits perfectly into the concept and vision of Oxnard being a sustainable community. Using living wetland systems as the city's basic flood conveyance system also improves: water quality, wildlife habitat, groundwater recharge, erosion control, plant and wildlife movement (including long-term migration), education, mental health, and physical health, among other benefits. Taxpayers pay for services to fix the environment they live in when developing our communities more holistically, working with natural processes instead of against them, that are more costly then they need to be.

Goal *ICS-5*, A passenger railroad system that services the needs of the residents and workers of Oxnard. The City should add a policy to Expand/create light-rail service in City, or incorporate this into Policy ICS-5.1. No neighborhood is more than 2 miles distant from an existing railroad track, with most city neighborhoods located within 1 mile from an existing railroad track. This offers the City with the opportunity to develop a citywide light-rail transportation system that provides accessible service to most City residents without the need to condemn land for a rail line corridor.

Goal *ICS-19*, Law Enforcement, adequate and effective law enforcement and the incorporation of crime prevention features in developments, focuses on the need for safe neighborhoods. However, none of the proposed policies recognize or highlight the benefit of trees and natural open spaces in neighborhoods to reduce the stress and anxiety of residents. Numerous studies (e.g. Chiesura 2004[24], Andersson 2006[25], van den Berg et al. 2007[26]) have clearly shown that neighborhoods with trees and live landscaping significantly

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[18] David Magney Environmental Consulting. 1998. Botanical Resources of the Bridle Ridge Development Project, Santa Barbara County. May 1998. (PN 97-0162.) Ojai, California. Prepared for County of Santa Barbara, Santa Barbara, California. Prepared on behalf of Rincon Consultants, Inc., Ventura, California.

[19] David Magney Environmental Consulting (DMEC). 2000. Wetland Functional Assessment of the Reinke Development Mitigation Plan, Thousand Oaks, California. November 2000. (PN 00-0131.) Ojai, California. Prepared for Rudy Reinke, Thousand Oaks, California.

[20] David Magney Environmental Consulting. 2001. Wetland Functional Assessment of the Odyssey Program Middle School Project, Malibu, California. December 2001. (PN 00-0301.) Ojai, California. Prepared for Odyssey Program, Malibu, California.

[21] DMEC. 2004. Wetland Functional Assessment of the Camarillo Regional Park Wetlands and Golf Course Projects, Ventura County, California. June 2004. (PN 02-0121-2.) Ojai, California. Prepared for California State Coastal Conservancy, Oakland, California.

[22] DMEC. 2006. Wetland Functional Assessment of the Gramckow Property Project, Rancho Matilija, California. 15 June 2006. (PN 06-0041.) Ojai, California. Prepared for Ventura County Planning Division, Ventura, California, on behalf of Martin Gramckow, Ojai, California.

[23] DMEC. 2009. Wetland Functional Assessment of the Lyons Property Mitigation Bank Project, Santa Paula Canyon, California. 10 March 2009. (PN 08-0152.) Ojai, California. Prepared for BioResource Consultants, Ojai, California, on behalf of Richard Lyons & Laurie Prange Lyons, Ojai, California.

[24] Chiesura, Anna. 2004. The Role of Urban Parks for the Sustainable City. *Landscape and Urban Planning* 68(1):129-138.

[25] Andersson, Erik. 2006. Urban Landscapes and Sustainable Cities. *Ecology & Society* 11(1):34.

[26] van den Berg, A.E., T. Hartig, and H. Staats. 2007. Preference for Nature in Urbanized Societies: Stress, Restoration, and the Pursuit of Sustainability. *Journal of Social Issues* 63(1):79-96.

reduce crime rates in those neighborhoods. This also reduces the need to add more police officers and required police facilities. Besides the safety issues/benefits, landscaping, especially when using native species, provides habitat for a number of wildlife species.

Environmental Resources Goals and Policies

The vision stated (GP2030, 5.1, Page 5-1) is that "the City increases its responsible stewardship of the environment in full compliance with state and Federal laws, and strives to exceed in a position of leadership in these areas". Good. However, the goals and policies do not do enough to possibly achieve this vision. Just being in compliance with state and Federal laws will not result in responsible stewardship of the environment. The City will have to do much more than what it has been doing, or what it is proposing to do according to the GP2030 to achieve responsible stewardship of the environment.

Section 5.2, Key Terms, provides some important definitions that need to be strengthened, expanded, or modified to better meet the stated vision for Environmental Resources, including that for Sensitive Natural Community and Special-Status Species.

Sensitive Natural Community needs to provide some metrics to allow resource experts, planners, and decisionmakers to better measure and determine which natural communities should be considered sensitive. Simply identifying communities tracked by the California Natural Diversity Database (CNDDB) is inadequate because the CNDDB data are not current or complete, as this agency is underfunded and understaffed. Furthermore, the sensitive natural communities presently identified and "tracked" by the CNDDB is outdated, using names no longer used by the scientific community, which has adopted the International Vegetation Classification system (Grossman et al. 1998[27]), which includes a National Vegetation Classification for the United States. The City should expand the definition to include the following: Sensitive Natural Communities are those natural habitats, when vegetated, are characterized by native plant species that are restricted in distribution (as a community), provides habitat for one or more special-status species, and meets the numeric criteria for Global, National, or State rarity ranking applied at the county level, as defined by NatureServe as a species or community's conservation status rank[28].

Special-Status Species are defined in the GP2030 (Section 5.2, Page 5-1) as, "those plants and animals that, because of their recognized rarity or vulnerability to habitat loss or population decline, are recognized by federal, state, or other agencies. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives".

This definition needs to be improved. The definition, and users, would benefit from the identification of metrics that provide a quantitative, rather than subjective, means to identify which species should be treated as Special-status Species. Table 2, Definitions of Special-status Species, provides a relatively

[27] Grossman D.H., D. Faber-Langendoen, A.S. Weakley, M. Anderson, P. Bourgeron, R. Crawford, K. Goodin, S. Landaal, K. Metzler, K.D. Patterson, M. Pyne, M. Reid, and L. Sneddon. 1998. *International Classification of Ecological Communities: Terrestrial Vegetation of the United States.* Volume I, *The National Vegetation Classification System: Development, Status, and Applications.* The Nature Conservancy, Arlington, Virginia. Available at NatureServe, http://www.natureserve.org/explorer/classeco.htm

[28] NatureServe Rarity Ranking, http://www.natureserve.org/explorer/ranking.htm#global

complete and comprehensive definition of which species should be considered by the City as Special-status Species.

Table 2. Definitions of Special-Status Species

o Plants and animals legally protected under the California and Federal Endangered Species Acts or under other regulations.	
o Plants and animals considered sufficiently rare by the scientific community to qualify for such listing; or	
o Plants and animals considered to be sensitive because they are unique, declining regionally or locally, or are at the extent of their natural range.	
Special-Status Plant Species	**Special-Status Animal Species**
o Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in *Federal Register* for proposed species). o Plants that are Category 1 or 2 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). o Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). o Plants considered by CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS 2001). o Plants listed by CNPS as plants needing more information and plants of limited distribution (Lists 3 & 4 in CNPS 2001). o Plants listed by CNPS as locally rare (Lake 2004, Magney 2007, Wilken 2003). o Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5). o Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). o Plants considered sensitive by other federal agencies (i.e. U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions. o Plants considered sensitive or unique by the scientific community; occurs at natural range limits (*State CEQA Guidelines*, Appendix G).	o Animals listed/proposed for listing as threatened/endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in *Federal Register* for proposed species). o Animals that are Category 1 or 2 candidates for possible future listing as threatened or endangered under Federal Endangered Species Act (54 CFR 554). o Animals that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). o Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). o Animal species of special concern to the CDFG. o Animal species that are fully protected in California (California Fish & Game Code, Sections 3511 [birds], 4700 [mammals], 5050 [reptiles, amphibians]). o Animals considered rare or sensitive locally by a local agency or scientific community (*State CEQA Guidelines*, Appendix G)

NatureServe's rarity ranking system is defined, with specific metrics, in Table 3, NatureServe Rarity Ranking Criteria. The metrics provided by NatureServe's definitions, which are used nationwide and internationally, can be easily applied at the local level, but require data on species populations and natural habitats.

Table 3. NatureServe Rarity Ranking Criteria

Global Ranking (G)	
G1	Less than 6 viable element occurrences (pops for species), OR less than 1,000 individuals, OR <809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; rank lower than G3, factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are **extirpated;** this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
Subspecies Level: Subspecies receive a **T-rank** attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. **For example:** *Chorizanthe robusta* var. *hartwegii* is ranked G2T1. The G-rank refers to the whole species range (*Chorizanthe robusta*), whereas the T-rank refers only to the global condition of the variety (var. *hartwegii*).	
State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known..
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern (i.e., there is some threat, or somewhat narrow habitat). NO THREAT RANK.
S5	Demonstrably secure to ineradicable in California. NO THREAT RANK.
SH	All California sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are **extirpated;** this element is extinct in the wild.
Notes	
1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.	
2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.	

Adopting the NatureServe conservation status ranking system criteria and applying it locally would provide credibility and support for species of plants and animals considered sensitive in Oxnard. Using the ranking

levels of 1 and 2 for those species at the county level, as has been done by the County of Ventura, would provide such a metric. The Channel Islands Chapter of the California Native Plant Society's list of locally rare plants of Ventura County (Magney 2008[29]) uses a conservative set of metrics adopted from the NatureServe conservation status ranking system (Magney 2004[30]).

Interestingly, while the GP2030 (Page 5-2) defines special-status species, not one policy mentions special-status species, or rare, threatened, or endangered species. This is an unacceptable oversight/omission. Goal *ER-2, Maintain and enhance natural resources and open space* (Section 5.4, Biological Resources), is the appropriate goal under which a policy should be added to provide the specific guidance to decisionmakers, planners, and consultants.

DMEC recommends adding Policy ER-2.5, Protect Special-status Species, with suggested language describing the policy:

> *Special-status species shall be protected within the city from adverse impacts that may result in the loss of individuals or populations, depending on the species rarity status.*

This supports the GP2030's vision of a sustainable community and the Goal ER-2. The definition of special-status species is crucial because it determines the level of protection required. Formally listed species, such as the Ventura Marsh Milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*) or Saltmarsh Harvest Mouse (*Reithrodontomys raviventris*) would be given the highest level of protection under this policy, while species not as endangered would have a slightly higher impact threshold, such as for a locally rare species such as Beach Primrose (*Camissonia cheiranthifolia* ssp. *suffruticosa*) (Magney 2008[31]). The later category or special-status species could be impacted, with mitigation, while no impacts would be allowed for listed species, with the elimination of an entire population prohibited, but a portion of a population could be impacted, as long as that population remains viable biologically.

Maintaining a database of plant and wildlife species, including a list of special-status species that occur within the City's jurisdiction would greatly benefit decisionmakers, planners, consultants, and the public. However, since most cities lack the funds necessary to maintain a staff biologist, it is critical for the GP to provide strong and clear guidance on how to identify special-status species and track them. The Ventura County GP contains a policy that the County SHALL consult with the Audubon Society and California Native Plant Society on all projects containing biological resources for all discretionary projects. An alternative could be to require consultation of all lists of special-status species developed and published by agencies and organizations that provide such services. Below are examples of agencies and organizations that provide lists and information about special-status species that Oxnard should require be contacted/used to identify and conserve species that would be impacted from a land use decision within Oxnard.

- U.S. Fish and Wildlife Service [http://www.fws.gov/endangered/], is responsible for terrestrial and freshwater aquatic plants and wildlife protected by the federal Endangered Species Act (ESA).

[29] Magney, D.L. 2008. Checklist of Ventura County Rare Plants. 23 December 2008, Fourteenth edition. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on http://www.cnpsci.org/PlantInfo/01RarePlants.htm.

[30] Magney, D.L. 2004. Acceptability of Using the Natural Heritage Program's Species Ranking System for Determining Ventura County Locally Rare Plants. 25 November 2004. David Magney Environmental Consulting, Ojai, California. Prepared for California Native Plant Society, Channel Islands Chapter, Ojai, California. (Published at http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi.)

[31] Magney, D.L. 2008. Checklist of Ventura County Rare Plants. 23 December 2008, Fourteenth edition. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on http://www.cnpsci.org/PlantInfo/01RarePlants.htm.

- National Marine Fisheries Service (NMFS) [http://swr.nmfs.noaa.gov/], which is responsible for marine species, including species that only spend a portion of their life cycle in the marine environment, such as the Southern Steelhead. NMFS is responsible for marine species listed under the federal ESA.
- California Department of Fish and Game (CDFG), Natural Diversity Database (CNDDB) [http://www.dfg.ca.gov/biogeodata/cnddb/]
- California Native Plant Society (CNPS) [www.cnps.org], provides information on the native plants of California, with up-to-date information of rare plants through its *Inventory of Rare and Endangered Plants of California* [http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi] and the Channel Islands Chapter's "Checklist of Ventura County Rare Plants" [http://www.cnpsci.org/PlantInfo/01RarePlants.htm].
- Audubon Society, Ventura Chapter [http://www.venturaaudubon.org/frame.htm], provides information on birds of Ventura County, including bird sightings and counts.
- The Xerces Society[http://www.xerces.org/], focusing on invertebrate conservation.
- California Lichen Society (CALS) [http://californialichens.org/], provides information on lichens of California, including rare species [http://ucjeps.berkeley.edu/rlmoe/cals6_2.html].
- Sespe Institute [http://www.sespeinstitute.com/], provides cultural and biological resources information, including information and maps of terrestrial snails of Ventura County.
- David Magney's Flora of Ventura County [www.venturaflora.com], provides data on the biogeography and flora of Ventura County, with lists of plants from each of the 51 biogeographic regions of the County, including the Oxnard Plain.

These, and other information sources, should be identified in the GP2030 as resources that can be used to help the city reach its vision and goals to protect, restore, and enhance the biological resources found within and adjacent to the city.

Section 5.3 of the GP2030 has some strong and weak goals and policies to protection Oxnard's environmental resources.

Goal ER-1, Protected natural and cultural resources, agriculture, and open spaces. This goal is supported by two policies:

- Policy ER-1.1 Protect Oxnard's Natural and Cultural Resources, which states, "Protect the City's natural resource areas, fish and wildlife habitat, scenic areas, open space areas, parks, and cultural and historic resources from encroachment or harm".
- Policy ER-1.2 Protect Surrounding Agriculture and Open Space, which states, "Protect open space and agricultural uses around Oxnard through continued adherence to the Guidelines for Orderly Development, Ventura County Greenbelt programs, and to the intent of the Save Open-Space and Agricultural Resources initiative".

Policy ER-1.1 is excellent. But in order for this policy to be implemented meaningfully, the City must know what resources it possesses, in particular its biological resources. If the data provided in the 2006 Background Report is any indication of the City's knowledge of the resources present, with a maximum of 20 pages dedicated to describing them, then many opportunities to actually protect them are almost entirely lost. To rectify the data gaps problem the City apparently has regarding biological resources, DMEC

previously included a list of sensitive natural habitats and a list of vascular plants known to occur within and immediately adjacent to the City, included in DMEC's comment letter on the GP2030 DEIR. DMEC has also made its list of vascular plants of Oxnard available on the CNPS Channel Islands Chapter's Plant Checklists webpage[32]. The City needs to accurately map all the land cover, focusing on natural habitats/plant communities, following CNPS vegetation mapping and classification protocols. DMEC recently mapped Southern California Edison's Mandalay Beach property following those methods, which are the same methods adopted by the Ventura County Planning Division and National Park Service.

Section 5.4 contains goals to protect biological resources within and adjacent to Oxnard, as summarized below.

Biological resources are intended to be protected by Goal ER-2, Maintenance and enhancement of natural resources and open space is supported by four policies: Restoration of Ormond Beach Wetlands, Protection of Sensitive Habitat, Promote Areas for Open Space, and Design Review Process, ER-2.1 through ER-2.4, respectively. However, these policies are too weak to actually fully implant the goal.

For example, Policy ER-2.1, Restoration of Ormond Beach Wetlands, "Encourage the preservation, restoration, and enhancement of the Ormond Beach wetlands and Mugu Lagoon", has no teeth; it is only encouraging. The word "encourage" should be replaced with words like, require, fund, preserve, restore, enhance, represent real action and commitment. While this policy, as well as ER-2.2 and ER-2.3, is good, it is significantly weakened by the fact that the proposed zoning in the northern part of the Ormond Beach neighborhood precludes and restricts restoration, protection, and enhancement of the Ormond Beach and Mugu Lagoon wetland and coastal habitats. As sea level rises, these areas will become inundated and destroyed, with no place to migrate naturally to.

To meet the goal of maintaining and enhancing natural resources and open space, an additional policy is needed to provide the City planners and decisionmakers with the data required to make informed decisions. DMEC recommends including Policy ER-2.5: Obtain Data on Biological Resources, Fund knowledgeable biologists to develop list of plants and wildlife known to occur in the Oxnard Planning Area and map all natural habitats according to International Vegetation Classification[33] methods and protocols.

Water Habitats are intended to be protected by Goal ER-3, Protected, restored, and enhanced [sic] of water-related habitats and their associated plant and wildlife species, is supported by five policies: Preservation of Riparian Habitat, Review of Development Proposals, Request Mitigation Measures from Other Agencies, Reduce Impact on Harbor, Bay, and Ocean Water Quality, and Reduce Construction Silt and Sediment, ER-3.1 through ER-3.5, respectively.

Sensitive Habitat is intended to be protected by Goal ER-4, Protected, restored, and enhanced sensitive habitats, which is implemented through six policies: Encourage Protection of Sensitive Habitat, Limiting Activities in Sensitive Areas, Designation of Resource Protection Areas, Loss of Sensitive Habitats, Planning in Sensitive Areas, and Resource Protection Zoning Policies, ER-4.1 through ER-4.6, respectively.

Policy ER-4.1 is to "encourage protection of sensitive habitat protection and enhancement of contiguous areas over small-segmented remainder parcels. As stated for other similarly worded policies, using the

[32] California Native Plant Society, Channel Islands Chapter, Plant Checklists webpage (http://cnpsci.org/html/PlantInfo/Checklists.htm).

[33] IVC methods and protocols have been adopted by County, State, and Federal resource agencies, and Oxnard should also adopt them to maintain consistency and continuity. CNPS has refined the IVC for California vegetation in collaboration with the California Department of Fish and Game.

work "encourage" sound good, though it is really meaningless. The City needs to decide whether it really intends to protect sensitive habitats from development and maintenance activities permitted or funding by the City. The policy should be rewritten to say, "All habitats identified as sensitive, or providing habitat for special-status species, shall be protected". This modification puts the policy in a much stronger position to actually protect sensitive habitats. The suggestion by the policy that contiguous habitat areas are much more important than habitats on small parcels is misleading, as the sustainability and viability of a small area preserve compared to a large area preserve is dependent on a large number of variables, first of which is dependent on the target species or habitat type. There are many special-status species of plants and wildlife that do not require large, contiguous habitats to survive, although being supported by them certainly is beneficial and preferred.

One problem facing the City decisionmakers with this policy is that it leaves up to interpretation, usually by an environmental consultant hired by a developer/applicant who decides such things. This creates a situation with high potential for bias towards the consultant's client, and the City certainly lacks the expertise with biological resources in-house. For these and others reasons, the more specific and directive the language of the policy is, the better the results in achieving the goal.

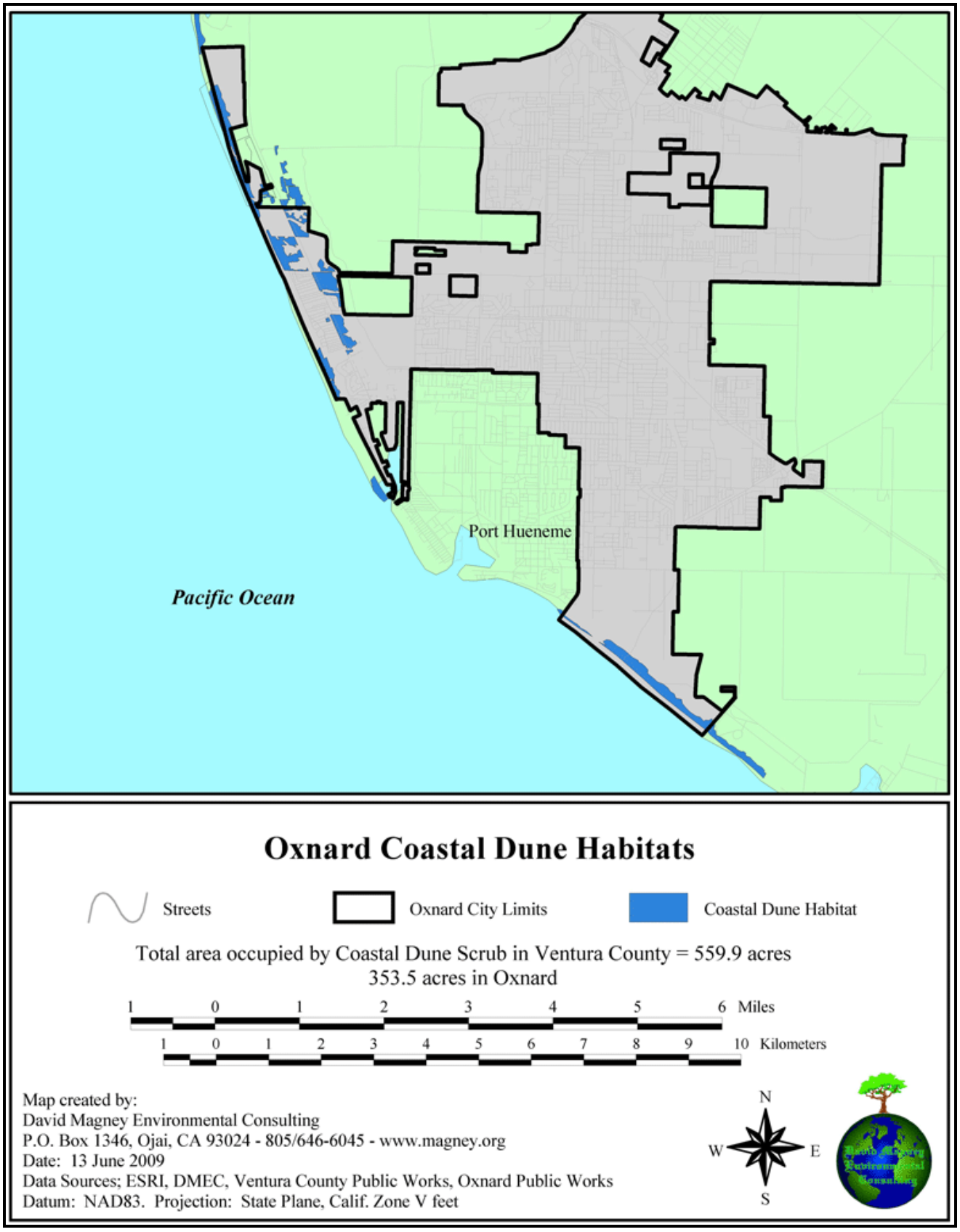
Policies ER-4.2, 4.3, and 4.5 are all good policies. However, Policy ER-4.4 is weak and superfluous. CEQA already requires sensitive habitats to be considered sensitive, and impacts to them to be treated as significant, requiring feasible mitigation; therefore, this policy doesn't do anything more to protect them. Rather, a affirmative statement that all sensitive habitats shall be protected would indeed require them to be protected, or at least forbidden from development that must receive a discretionary permit from the City. What would be better would be for the City to adopt a policy requiring the City to catalogue, map, and describe all the sensitive biological habitats present within the City's Planning Area. Then the City should zone all parcels containing sensitive habitats as Resource Protection or similar zoning that prohibits destruction of the habitat.

Some landowners will undoubtedly complain that their property rights would be violated; however, it is the greater good for the community that must be considered foremost in determining the goals of the GP. In support of this, studies have demonstrated that natural ecosystems provide important and valuable ecological services to communities (Costanza et al. 1997[34]). The costs, including economic costs, must be considered when replacing functioning habitat with an artificial development. In fact, the whole purpose behind the General Plan is to guide and control the development of a city or county with the big picture in mind, always, not that of individuals.

An example of sensitive habitat known to occur in Oxnard, which has not been adequately studied by the City's consultants, is that of coastal dunes. The City of Oxnard contains most of the remaining coastal dune habitat in Ventura County, as illustrated in Figure 2, Map of Coastal Dunes in Ventura County and Oxnard.

[34] Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R.V. O'Neill, J. Paruelo, R.G. Raskin, P. Sutton, and M. van den Belt. 1997. The Value of the World's Ecosystem Services and Natural Capital. *Nature* 387:253-260.

Figure 2. Map of Coastal Dunes in Ventura County and Oxnard



Coastal dunes within Ventura County totals 559.9 acres (226.6 hectares), as 33 discrete mapped areas[35]. That portion within the city limits is 353.5 acres (143.1 hectares) in 17 discrete mapped areas. Since DMEC first mapped coastal dunes on the Oxnard Plain in 2006, approximately 40 acres has been destroyed to accommodate development, mostly for urban uses. In the 1990s, nearly all the coastal dunes and backdune swale wetland habitats that occurred between Hollywood Beach and Oxnard Shores were destroyed to accommodate housing and a resort hotel, all of which could have been developed without destroying these sensitive habitats.

Other sensitive habitats are known to occur in the Oxnard area. DMEC developed a list of sensitive plant communities for the Ventura County Planning Division based on DMEC's knowledge of the vegetation of Ventura County, and using CDFG's list of sensitive plant communities. The result was that 153 plant communities considered rare (i.e. sensitive) are known to occur in the County, 65 of which occur in Oxnard. Based on that list, those sensitive communities known or expected to occur in Oxnard are provided below in Table 4, Sensitive Plant Communities of the Oxnard Area.

Table 4. Sensitive Plant Communities of the Oxnard Area

Code	Plant Community Name	Scientific Names	Holland Code
21.100.00	Sand-verbena-Beach Bursage	*Abronia villosa-Ambrosia chamissonis*	21210
21.100.07	Strand		
21.100.10	Southern Dune Scrub		21330
21.110.00	Beach Bursage	*Ambrosia chamissonis*	
31.200.00	Southern Coastal Bluff Scrub		31200
32.020.05	Black Sage - Coast Prickly-pear	*Saliva mellifera-Opuntia littoralis and hybrids*	
32.040.03	California Buckwheat - Big Sagebrush	*Eriogonum fasciculatum-Artemisia tridentata*	
32.040.04	California Buckwheat Alluvial Fan	*Eriogonum fasciculatum*	
32.050.00	California Encelia Scrub	*Encelia californica*	
32.050.02	California Encelia	*Encelia californica*	
32.060.03	Coyote Brush / Creeping Ryegrass	*Baccharis pilularis/Leymus triticoides*	
32.060.10	Coyote Brush / Purple Needlegrass	*Baccharis pilularis /Nassella pulchra*	
32.150.00	Coast Prickly Pear Succulent Scrub	*Opuntia littoralis*	
32.160.00	Dune Lupine - Goldenbush Scrub	*Lupinus chamissonis-Isocoma menziesii*	21330
32.160.01	Heather Goldenbush	*Ericameria ericoides*	
32.160.02	Dune Lupine	*Lupinus chamissonis*	
32.160.03	Dune Lupine - Heather Goldenbush	*Lupinus chamissonis-Ericameria ericoides*	
37.801.00	Sugarbush Scrub	*Rhus ovata*	
41.140.00	Nodding Needlegrass	*Nassella cernua*	
41.150.00	Purple Needlegrass	*Nassella pulchra*	
41.150.01	Italian Ryegrass - Purple Needlegrass	*Lolium multiflorum-Nassella pulchra*	
41.150.02	Wild Oats - Purple Needlegrass	*Avena fatua-Nassella pulchra*	
41.170.00	Valley Needlegrass Grassland	*Achnatherum* spp.	42110
41.200.06	Jaumea – Saltgrass	*Jaumea carnosa-Distichlis spicata*	
41.200.07	Saltgrass - Alkali Heath – Jaumea	*Distichlis spicata-Frankenia salina-Jaumea carnosa*	

[35] As mapped by DMEC using GIS software and high-resolution color aerial photography dated October 2004 and updated with September 2007 aerial photography.

Code	Plant Community Name	Scientific Names	Holland Code
41.200.08	Alkali Saltgrass		
41.290.00	Wildflower Field		42300
41.640.00	Blue Wildrye Grassland	*Elymus glaucus*	
41.640.01	Blue Wildrye	*Elymus glaucus*	
45.210.07	Spikerush - Water Pygmy	*Eleocharis* spp.-*Crassula aquatica*	
52.101.00	Bulrush	*Scirpus* spp.	
52.101.01	California Bulrush Wetland	*Scirpus californicus*	
52.102.04	Brackish Bulrush – Cattail	*Scirpus* spp. - *Typha* spp.	52200
52.103.01	Brackish Cattail	*Typha* spp.	
52.107.00	Pondweeds with floating leaves Wetland	*Potamogeton* spp.	
52.108.00	Pondweeds with submerged leaves Wetland	*Potamogeton* spp.	
52.111.02	Common Three-square/ Silverleaf Cinqufoil	*Scirpus americanus/Potentilla anserina*	
52.112.00	Alkali Bulrush	*Scirpus maritimus*	
52.112.01	Alkali Bulrush / Pickleweed	*Scirpus maritimus/Salicornia* spp.	
52.112.02	Alkali Bulrush – Cattail	*Scirpus maritima. - Typha* spp.	
52.201.00	Pickleweed Wetland	*Salicornia* spp.	
52.201.01	Common Pickleweed	*Salicornia virginica*	
52.201.03	Common Pickleweed – Saltgrass	*Salicornia virginica-Distichlis spicata*	
52.201.04	Common Pickleweed - Jaumea – Saltgrass	*Salicornia virginica-Jaumea carnosa*	
52.201.07	South Coastal Pickleweed Salt Marsh		
52.201.08	Alkali Pickleweed		
52.202.00	Ditch-grass Wetland	*Ruppia* spp.	
61.120.00	Black Cottonwood Riparian Forests and Woodlands	*Populus balsamifera*	61110
61.130.02	Southern Cottonwood - Willow Riparian	*Populus* spp.-*Salix* spp.	61330
61.201.00	Arroyo Willow Riparian Forests and Woodlands	*Salix lasiolepis*	
61.201.01	Central Coast Arroyo Willow Riparian	*Salix lasiolepis*	61230
61.201.02	Southern Arroyo Willow Riparian	*Salix lasiolepis*	
61.204.00	Pacific Willow Riparian Forests	*Salix lucida* ssp. *lasiandra*	
61.205.00	Red Willow Riparian Forests	*Salix laevigata*	
61.207.00	Mixed Willow Riparian Forests and Woodlands	*Salix* spp.	
61.208.00	Southern Willow Scrub	*Salix* spp.	
61.800.00	Walnut	*Juglans* spp.	
61.920.00	Southern Mixed Riparian Forest		61340
61.930.00	Southern Riparian Forest		61300
63.110.00	Narrowleaf Willow	*Salix exigua*	63410
63.130.00	Southern Willow	*Salix* spp.	63320
63.160.00	Subalpine Wetland Shrub Habitat		
63.410.01	Elderberry Savanna	*Sambucus mexicana*	63440
63.900.00	Southern Riparian Scrub		63300
72.100.01	California Walnut Woodland	*Juglans californica var. californica*	71210

Many of these sensitive habitats are wetland habitats, and many of them are coastal in nature. These communities are at extreme risk of extirpation from development, indirect impacts from human actions and land use practices, and encroachment by the ocean as sea levels rise.

DMEC wishes to recognize that while this letter is highly critical of certain aspects of the Draft GP2030, many aspects of the Draft GP2030 are good, and should be supported by eliminating the deficiencies identified above. Please contact DMEC if you have any questions regarding this comments and recommendations.

Respectfully,

David L. Magney
President

cc: Karen Kraus, Environmental Defense Center