



**COMPREHENSIVE PLAN UPDATE
CITIZENS ADVISORY COMMITTEE
SUBCOMMITTEE
NATURAL ENVIRONMENT ELEMENT**

November 30, 2016

Downtown Library – El Camino Real Room
270 Forest Avenue
Palo Alto, CA 94301
2:00 PM to 5:00 PM

TITLE: Natural Environment Element Subcommittee Discussion
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Background

This will be the fourth subcommittee meeting on the Natural Environment Element. At this final meeting of the NEE subcommittee, the group will discuss all eight goals of Draft Natural Environment Element. This discussion follows the subcommittee meetings when goals 5 through 8 were discussed (October 5th) and goals 1 through 4 were discussed (November 1st). The CAC discussed the element at three meetings, focusing on the amended goals 5 through 8 on October 18th and goals 1-4 on November 15th as recommended by the subcommittee.

The Natural Environment Element is composed of the following eight goals:

1. Open Space
2. Creeks and Riparian Areas
3. Urban Forest
4. Water Resources
5. Air Quality
6. Noise
7. Energy
8. Climate Change and Climate Adaptation

As shown on the agenda, specific times for these topics are proposed in order to accommodate staff experts from Community Services, Public Works, Utilities, Fire and Sustainability Departments.

Staff Reports for previous Natural Environment Subcommittee and CAC Meetings contain summaries of, and links to, numerous documents, studies and City effort related to Palo Alto's natural environment. Both the [August 30th Natural Environment Subcommittee Staff Report \(link\)](#) and [September 20th CAC Staff Report \(link\)](#) contain this information.

Policy Framework Changes and Issues

The attached Natural Environment policy framework reflects the input contributed at the October 18th (Goals 5 through 8) and November 15th (Goals 1 through 4) CAC meetings, as well as City staff recommendations.

Throughout the Element, subheadings have been added to aid in navigation at the request of CAC members, and some policies and programs were re-ordered and regrouped accordingly.

The major changes under each goal are listed below.

Goal N-1: Open Space

The wording throughout the Open Space section has been revised to better specify the type of open space—private, public, preserve, etc.—that is targeted by a given policy or program. This was done in response to concerns, expressed by CAC members, that the range of lands defined as “open space” is large and may confuse readers.

- Goal N-1 was revised to include *accessibility* as a vital characteristic of open spaces.
- The following subheadings were added:
 - Connectivity and Ecology
 - Access and Recreation
 - Natural Character of the Foothills
 - Expansion of Parks and Open Space
- Program N1.3.2 was added to express support for enhancement of private residential yards into sustainable natural spaces.
- Program N1.4.1 was clarified to explain the source of Palo Alto’s list of special statues species, which includes both federal and State regulatory agencies as well as recognized non-profit organizations such as the Audubon Society and the California Native Plant Society.
- Through New Program N1.4.3, the City would assess the potential of expanding sensitive habitats in its open spaces. Please note that the Land Use Element includes a program (L10.2.2) to evaluate the introduction of burrowing owl habitat at the airport.
- Program N1.5.1 was generalized to ensure adequate water flow and minimize effluent to all wetlands and remove the specific reference to ITT Marsh.
- In Policy N1.9, development criteria included in the original policy were reinstated, in order to provide a policy basis for Zoning Code provisions that ensure that any new homes in the Open Space designation in the foothills minimize visual and natural impacts.
- Policy N1.10 now recognizes the value of an open space system that extends in all directions – north/south as well as east/west.
- Through new Program N1.10.2, the City would pursue opportunities to dedicate publicly-owned but undedicated land as parks.

Goal N-2: Urban Forest and Understory

This goal was made Goal N-2, switching places with the Creeks and Riparian Areas goal, so that Goal N-4, Water Resources, could immediately follow Creeks and Riparian Areas.

- The following subheadings were added:
 - Role of the Urban Forest
 - Protection and Expansion
 - Partnerships for the Urban Forest
- Several CAC members expressed support for the comments provided by Canopy. The majority of those comments had already been incorporated in the November 15th draft of the Natural Environment Element; staff has reviewed the remaining requested changes and has incorporated the intent/content of the changes, but reworded some for brevity, clarity, and consistency of tone.
- In Policy N2.2, wording that the urban forest “should” be protected was changed to “must” be protected.
- Program N2.4.1 was moved from its previous location in the Stormwater section of the Safety Element, in order to provide additional support for Policy N2.4 regarding soil protection. It calls for promoting landscape design that optimizes soil health.
- New Policy N2.5 establishes the long-term goal of achieving both a 50 percent tree canopy cover in the City and equity in canopy cover across neighborhoods.
- A clause was added to Program N2.6.1, calling for “identifying and replacing unhealthy trees” in public areas in response to CAC concern about aging trees.. In addition, new Program N2.11.2 is to develop a program to replace unhealthy public trees.
- Program N2.9.2 was added to revise the tree removal appeals process to consider allowing community members to appeal, not only the affected property owner.
- “Residents” and “tenants” were added to Program N2.13.2 to ensure renters are included.

Goal N-3: Creeks and Riparian Areas

Policies and programs under this goal focus first on setbacks and the need for revised setbacks tailored to specific creek conditions, which received substantial comment at the November 15th CAC meeting, then on management for all types of creeks. Based on CAC discussion, the policies and programs about creek management are no longer bifurcated into “natural” vs. “urban” policies and prog and instead reflect that all creeks have the potential to serve as habitat, connective corridors, recreational resources, and flood control infrastructure.

- Goal N-3 was revised to include “Both Natural and Channelized Creeks...”
- The following subheadings were added:
 - Creek Setbacks
 - Management and Enhancement

- Policy N3.1 was revised into two sentences to stress the differences in creek types. It now states that “All creeks are valuable resources that need different conservation and enhancement strategies,” and stresses the importance of recognizing different characteristics of these creeks.
- New Policy N3.2, adopted from Policy N3.9, calls for preventing the further degradation of all creek types, all of which are “potential habitat areas, storm drain and flood control facilities, elements of community design and connective natural corridors.”
- Policy N3.3 calls for establishing a range of creek setback guidelines to maximize protection of all creek types.
- The content of Program N3.3.1 was largely returned to its original wording. It calls for adopting a 100-foot setback, with appropriate exceptions, along natural creeks in open space and rural areas. It was also revised to ensure that the Stream Corridor Protection ordinance is updated to adequately address appropriate setbacks and creek conservation measures.
- Program N3.3.3 calls for updating the Stream Corridor Protection Ordinance to limit trail development, and to minimize the impact of lighting and mulch.
- In response to CAC and subcommittee suggestions, Policy N3.8 and accompanying programs were consolidated and streamlined. Policy N3.8 calls for cooperation with other agencies to enhance riparian corridors. Program N3.8.1, which calls for specific work with SCVWD on a creek restoration program, is a combination of Previous Programs N-10 and N-11.

Goal N-4: Water Resources

The water resources goal has received a significant overhaul since it was last reviewed by the subcommittee based on CAC and staff feedback. Members of the CAC expressed consensus support for consolidating all Comp Plan water policies under a single goal. Accordingly, the words “water resources and infrastructure that are managed...” have been added to Goal 4, and it has been organized into the following subheadings, with changes to individual policies and programs (some based on input received during discussion of the Safety Element) listed below each subheading:

- Water Supply and Safety (includes policies removed from Infrastructure Goal of Safety Element, and original water Resources policies)
 - Policy N4.4 was added to support water use for plants and animals as well as for humans.
- Drought (all policies from Infrastructure Goal of Safety Element)
 - Although some CAC members supported moving this topic back to Natural Hazards in the Safety Element, it is closely connected to water supply and groundwater topics included under Goal N-4. It is left as part of the Water Resources topic for subcommittee consideration.
- Groundwater (a new subheading)
 - Program N4.7.1 regarding a groundwater management plan has been broadened from a narrow focus on dewatering to encompass an understanding of subsurface ecology, strategies to reduce depletion, and opportunities for recharge.

- Similarly, the wording of Policy N4.8 and associated Program N4.8.1 have been revised to broaden the intent regarding residential basement dewatering and to support research into alternative construction methods.
- Water Quality and Stormwater Management (includes policies removed from Infrastructure Goal of Safety Element, and original water Resources policies)
 - These policies and programs were reordered and consolidated.
 - Policy N4.12 was elevated from a PTC program to a policy and expanded to cover landscaping practices on both public and private property. It now serves as the policy home for three programs, one on the City’s Integrated Pest Management policy and two regarding least-toxic and toxic-free landscape management on private property.
- Wastewater Treatment (moved from Infrastructure Goal of Safety Element)
 - Including growth in surrounding communities and ongoing operations of the Regional Water Quality Control Plant was added to Program N4.16.2.
- Recycled Water (all policies from Infrastructure Goal of Safety Element)
 - New Program N4.17.2 was added to evaluate the possibility of using recycled water as an emergency water supply.

Goal N-5: Air Quality

Since this goal is relatively brief, no subheadings were added.

- Program N5.2.3 was added to consider adopting and enforcing penalties for idling.
- In Policy N5.3, leaf blowers were added to the list of potential emitters of particulates.
- Program N5.3.3 was added, to ensure ongoing monitoring of particulate emissions.
- Added the wording “feasible and cost-effective” to Program N5.3.6 regarding alternatives to concrete and asphalt in public projects.

Goal N-6: Noise

At the October 18th meeting, CAC members expressed concern that the Noise section needed stronger protections against both ambient noise and construction noise, including considering additional requirements for analysis and use of different metrics besides Ldn, a common metric for ambient noise based on a 24-hour “day-night” (dn) measurement. In response to CAC concerns, the Noise goal has received the most substantial revision among Natural Environment goals.

Subtopics under this goal were renamed and reorganized. Revised subtopics are:

- Ambient Noise and Project Design
 - The role of the Comp Plan, according to State statute requirements for Noise Elements, is to address the future, long-term noise environment and to provide guidance for siting land uses appropriately given that future noise environment. Therefore, this section of the Comp Plan should take a “30,000 foot view” of noise and contemplate major permanent noise sources such as traffic, trains, airplanes, manufacturing, etc. as well as

the potential effects of that noise environment on interior and exterior noise levels for future sensitive receptors: homes, schools, hospitals, open space, and the like.

- Roadway noise was moved into this section since it is a primary long-term ambient noise source and since there was only one policy remaining under the former “Transportation Noise – Roadway” subheading.
- New Permanent Noise Sources
 - This section provides the policy basis for the Noise Ordinance. This topic, and the Noise Ordinance, address immediate and/or intermittent noise sources that could have a negative effect on existing development, such as mechanical equipment, loading docks, or outdoor activities. .
 - In response to CAC feedback, a new Policy N6.4 has been added to protect residential and residentially-zoned properties from excessive and unnecessary noise from any sources on adjacent commercial or industrial properties, as well as new Policy N6.7, which requires acoustical analysis and demonstrated Noise Ordinance compliance for new projects in the Multifamily, Commercial, Manufacturing, or Planned Community districts to prevent impacts on nearby residential neighborhoods. This policy is based on existing City requirements in Section 18.23.060 of the Municipal Code.
 - Policy N6.5 regarding noise impact analysis requirements retains the existing Comp Plan wording, which requires analysis for projects subject to CEQA. This mechanism provides clear direction to City staff on how to apply requirements based on an existing, established legal framework, and encompasses a broad range of different types of projects, including, in some cases, single-family homes.
 - New Policy N6.8 and its associated Program would continue to regulate noise from leaf blowers and other lawn equipment. These are also addressed in detail in the existing Noise Ordinance.
- Construction Noise
 - This subtopic was formerly the last one under the Noise goal; it has been moved up to reflect the concern expressed by the community and CAC..
 - CAC members expressed concern that construction noise or other short-term noise events would not be accurately measured if the Ldn metric was used. Noise events, including construction, are not measured using Ldn. Ldn is used to assess a community’s overall ambient noise levels for purposes of evaluating land use compatibility and appropriate siting of sensitive receptors. It is not used to measure the impacts of construction noise, mechanical noise, special events, etc. These “noise excursions” are measured based on the instantaneous or peak amount of sound generated.
 - Note that Palo Alto’s current restrictions in the Noise Ordinance are actually more restrictive than most California communities. In addition to limiting the hours of construction, which is common, Palo Alto provides specific caps on the cumulative decibel levels of construction equipment measured 25 feet from the property line.

- Policies N6.9 and N6.10 and Program N6.9.1 regarding construction noise have been revised to focus on noise control measures. In the experience of the consultant’s senior acoustical engineer, construction noise monitoring is typically required only for large, long-term projects such as SUMC or major infrastructure projects like grade-separating Caltrain. Monitoring for individual infill projects would be onerous and complicated, and, more importantly, would only identify a problem, not resolve it. In response to CAC concerns, the revised policies and programs seek to strengthen the Noise Ordinance still further and actually reduce construction noise from these projects of community-wide significance, rather than only measure it.

Goal N-7: Energy

This section has been revised to reflect input from City of Palo Alto Utilities staff received since the October 18th CAC meeting. Since it contains a relatively brief set of policies and programs, no subheadings have been added.

- Policy N7.1 has been reworded per Utilities staff so that it accurately reflects the types of energy and sources of energy the City procures. This policy addresses both a carbon-neutral energy supply and efficiency and conservation. In reviewing the Energy section it became clear that several other policies repeated these same points. These redundant policies have been deleted.
- In Program N7.1.2, phase out “carbon offsets” has been replaced by “renewable energy credits,” which is the term used by City of Palo Alto Utilities. The meaning is the same (and this process is currently underway). Subcommittee members expressed their lack of support for this energy strategy, citing the fact that offsets are not a quantitative reduction in carbon, only a redistribution of carbon use, and a transfer of valuable capital, out of Palo Alto.
- Program N7.5.1 has been revised per Utilities staff to reflect changes in State law regarding how services may be priced.
- A new Program N7.6.1 has been added to monitor professional and medically-sound research and studies on light-emitting diodes (LEDs).
- New Program N7.73 would evaluate ways to encourage solar energy.
- Policy N7.8 previously encouraged a shift to all-electric buildings, consistent with a strategy expressed in the Draft S/CAP intended to reduce the GHG emissions associated with natural gas use. In response to CAC concerns and Utilities staff feedback, this policy has been revised to “Explore a variety of cost-effective ways to reduce natural gas usage in Palo Alto.” Similarly, an associated program that would have called for incentives for transitioning from natural gas to electric appliances has been removed.
- Policy N7.9 regarding energy from organic waste has been reworded to be more concise. The intent has not changed.

Goal N-8: Climate Change

This section did not receive substantive comments at the October 18th CAC meeting. Since it contains a relatively brief set of policies and programs, no subheadings have been added

Next Steps

The entire, fully revised Natural Environment Element (along with the Safety Element) will be reviewed a final time by the full CAC at the December 13th meeting to consider recommending the Element to the City Council for their review early next year.

Attachments

Attachment A: Natural Environment Policy Framework, tracked

Attachment B: Natural Environment Policy Framework, clean