

Some Considerations for Promoting Forest Protection Practices in Puna

The Natural Resource Protection Working Group is seeking ways to promote preservation and better management of Puna's extensive forest lands that lie outside of the Conservation District. A particular expressed interest is to discourage and prevent the practice of "clear-cutting" properties to make way for development.

A variety of approaches is being considered, including regulations, incentives (primarily tax breaks), and public education. These approaches are not mutually exclusive. In fact, a strategy that combines these approaches would probably be most effective.

Before such a strategy is designed, however, it is important to define the objectives for forest protection and be clear about what can realistically be achieved. Following are some considerations to address:

1. **What types of forests are to be protected?** Should this include open canopy as well as closed canopy forests? Should it be limited to areas where native species are predominant?
2. **Should the protection be focused on mature trees or extend also to understory?** If the latter, limitations on grubbing will be necessary, as well as inventories of understory conditions prior to land disturbance. This could be a burden on small lot owners of limited means.
3. **Are adequate maps available to define forest protection areas?** The most complete inventories cover only Conservation Lands. What is needed to develop maps for areas in the Agriculture and Urban Districts?
4. **Should lots below a certain size threshold be exempt from regulatory limitations on land clearance?** However, clearance of even a small area of, say, one acre, could have an adverse impact if the surrounding lands are covered by relatively intact native forest.
5. **Should there be regulations and standards for timber operation in the Agriculture District?** At present, timber operations are regulated in the Conservation District, but not in the Agriculture District, even though environmental conditions in the Agriculture District may, in some instances, be highly sensitive to disturbance.
6. **If regulations are adopted, what types of standards should they contain?** Some municipalities establish uniform minimum tree canopy standards, but this may not be appropriate in Puna, where there is a diversity of microclimates, forest types and canopy coverage.
7. **If regulations are adopted, what agency should administer them and what expertise do they need on staff?** The Department of Public Works administers the grading ordinance, but this agency does not show an inclination to regulate forest protection as part of the scope of its responsibilities. The Planning Department is a more likely agency for this responsibility, but they will probably need specialized staff to assume it.
8. **If regulations are adopted, how would they most effectively be enforced?** Given the County's limited ability to monitor activities in remote areas, it would be useful to think about how to partner with others in the protection of forest lands. How can other organizations, such as the Soil & Water Conservation District and UH Extension Service assist? How can we develop public education programs to raise awareness about how to care for the forest so that we do not have to rely so much on enforcement mechanisms?

The above is not meant to be an exhaustive list, and it is not meant to imply that the Working Group needs to provide definitive answers to all of the questions. Nevertheless, the more clearly we can define realistic objectives and parameters for forest protection on private lands in the Puna Community Development Plan, the more likely it is that such a proposal will be implemented.

Below are some examples of forest protection regulations for a variety of settings and purposes. A very large number of municipalities have adopted tree protection ordinances, but these are a sampling of some jurisdictions that have looked beyond the trees to see the value of the forest.

- **Oregon's Forest Practices Act**

<http://www.odf.state.or.us/pcf/fp/fpa.asp?id=401010207>

Adopted in 1971, this was the first statute in the nation to promote sustainable forestry practices on private lands. It encompasses mandates for the sound management of soil, air, water, fish and wildlife resources. It also helps preserve scenic resources along visually sensitive corridors and reduces the risk of serious bodily injury or death caused by shallow, rapidly moving landslides directly related to forest practices.

- **Oregon Forest Practice Rules**

<http://extension.oregonstate.edu/catalog/pdf/ec/ec1194.pdf>

This was a 1992 update of the first version of the rules, implemented in 1972, and is focused on soil erosion and water pollution prevention.

- **Oregon Department of Forestry, Forestry Laws and Rules**

<http://egov.oregon.gov/ODF/lawsrules.shtml>

These rules identify and adopt Forest Protection Boundaries.

- **Portland, Oregon, Pleasant Valley Natural Resource Protection Overlay Zone**

<http://www.portlandonline.com/shared/cfm/image.cfm?id=82635>

Adopted in the Portland Municipal Code, Section 33-465, this ordinance is a good example of an "overlay" zone that applies to a residential area within the city limits where Portland wished to retain a significant tree canopy. "Overlay" is a technique that establishes special controls on how a property is developed and maintained without taking away the "underlying" permitted use, which in this case is residential.

- **Brighton, Michigan, Land Clearing/Tree Preservation Ordinance**

<http://www.brightontwp.com/Zoning%20Ordinance/Article%2011%20Land%20Clearing%20Tree%20Preservation.pdf>

This municipal legislation, adopted as Ordinance No. 227, Article 11, controls not only tree removal, but also limits grubbing to protect understory, and establishes tree canopy standards. Residential lots less than 2.5 acres in size are exempt.

- **Fulton County, Georgia, Tree Preservation Ordinance**

<http://www.fultonecd.org/develop/treeord/tree-04.pdf>

Fulton County, which includes the city of Atlanta, establishes varying tree protection standards depending on the underlying zoning district. Of particular note with reference to Puna, there are guidelines for forestry practices in agricultural areas.