

Comprehensive Environmental Management Services and Planning Needs for the HOA Governed Subdivision

Many of the well designed and professionally engineered communities in our region possess multitudes of ecologically sensitive areas that require short and long term management planning. In order to prevent degradation to community infrastructure, dwelling units, and/or aesthetics; proactive planning may be essential as these issues are typically not considered in the pre-construction phases of development and community build-out. Various open space areas within the community setting are referred to as “Management Units (MUs)” by the Environmental Planner. The Best Management Practices (BMPs), and the underlying principles and processes that may be required to restore, improve, and maintain eco-sensitive MUs in communities may apply to:

- **Stormwater Management Systems, (including but not limited to, ponds, bio-swales, retention basins, etc. and the associated conveyances)**
- **Coastlines and Riparian Zones (the transitional land area between open water and upland)**
- **Forested areas**
- **Wetlands and poorly drained areas**
- **Large or small community Open Space (typically consisting of extensive mowed turf zones)**



Community environmental MUs, BMPs and implementation procedures may be recommended and advised by the Environmental Planner; however,

the concluding goal(s) and objectives should be determined between property managers, homeowner association (HOA) representatives and the Environmental Professional by way of a collaborative and interactive process. Before the collaborative process begins between the stakeholders involved, the Environmental Planner conducts site assessments and reviews site approved plan(s) to determine existing conditions and report(s) on recognized deficiencies and/or the potential for future deficiencies.

The initial assessment and reporting process is followed by a comprehensive enhancement and/or management plan specific for the MUs of concern. The plan design utilizes the BMPs and technologies that meet user goals and objectives with the least amount of negative impact

to the environmental conditions such as water quality, soil structure, native beneficial vegetation, habitat, and aesthetics. It is imperative that all local, state, and federal environmental regulations applicable to the site be considered and inclusive to the plan. Preexisting or required permits and stipulations should be heavily considered during design stages. Grant funding assistance from environmental regulatory agencies or private sources should also be researched and reported for consideration.

Next, the Environmental Professional presents the plan to the stakeholders in a formal educational setting (community clubhouse or conference rooms work well), complete with text narration and a verbal explanation of the principles and processes recommended. Modeling of the existing conditions and comparisons to the anticipated final product expectation is beneficial. These steps of the process are significant to address all learning styles and ensure holistic understanding. The collaborative stage is also an important time for all stakeholders to pool resources and become involved if desired.



The Environmental Planner will also describe any and all products and tools required to meet the project expectations. It may be at this point of the process that the HOA representatives provide input as to

the specific user wants and needs. This is where the homeowners establish project “ownership” and commitment to success. The obtained information is then refined and incorporated into the final plan product and presented to the stakeholders (typically the HOA board, property manager or owner/developer) for final review and approval.

Key(s) to Successful Community Environmental Management Services Planning
• Education • Collaboration • Implementation

Examples of Environmental Management Services Planning and the collaborative process required to ensure a successful community project may include the conversion of a Stormwater Management Pond(s) and/or wetlands into functional ecosystems. With a profound emphasis on natural beauty, this type of amenity-driven project may improve community quality of life by enhancing common grounds by way of propagating the

system for active and passive recreational facilities usage. Stormwater management systems, especially those with permanent pools of water or hydric soils (wetland status) are living systems and go through “Successionary Change” very quickly over time if left unmanaged and unmaintained. Therefore, they must be arrested in a static state of growth and development. Determining the desired stage of growth and development, from an ecological standpoint, is not easy without collaboration with homeowners and other stakeholders. This requires educational outreach and the modeling of product outcomes for clear understanding of expectations on the users’ part. A “Comprehensive Stormwater Management Plan” is completed once all relative data and information is collected. The Comprehensive Stormwater Management Plan and its underlying processes and product requirements should be incorporated into a manual form to serve as an implementation guideline and community reference. Final plans should emphasize, but are not limited to:

- **Aquatic bacteria and algae control**
- **Aquatic vegetation control**
- **Fish and wildlife management (goose and muskrat control)**
- **Human impact and restrictive use**
- **Integrated Vegetative Management for invasive species**
- **Aeration (if applicable)**
- **Structural monitoring and deficiency reporting**
- **Due diligence requirements**
- **Products required (herbicides/pesticides)**
- **Licenses and certifications**



Water Quality Management Products

When considering Environmental Management Services Planning for community coastal areas (riparian zones), forested areas and wetlands, it is important to initiate collaboration

regarding Integrated Vegetation Management Programing. Emphasis is required on BMPs to control vegetative types that are native nuisance and or exotic invasive species. The control and or eradication of viney material, *Phragmites australis* and other species that reduce biological diversity, degrade natural beauty, reduce soil stability or create fire hazards are important considerations in the plan. This typically includes the use of the most appropriate form of environmental friendly herbicide (typically systemic salts) and then, over time, conventional removal or composting practices. The removal of undesirable vegetation, as well as the management and the propagation of native vegetation may improve view corridors out to wetlands

and open water, which may in turn improve property values. Controlling “Coastal Invaders” such as *phragmites australis* protects dwelling units and community infrastructure from rhizome (later root) intrusion and an undesirable source of fuel for wildfire. Like any Environmental Management Plan this requires a site assessment, an existing conditions study and reporting to the stakeholders involved during the collaboration process. User goals may include any habitat enhancement that maybe desired, such as nesting platform installation for ospreys and or other migratory birds, large or small. The vegetative types selected in the plan and canopy elevations may also be determined during the collaborative process.

One other exciting type of Environmental Management Services that may provide for a most sustainable community is “Conservation Landscape Planning (CLP)” for large tracks of open space within a subdivision’s common grounds. During build-out procedures, many subdivisions are stripped of native vegetation stands and forested areas and the organic layer of soil for the creation of bare lots. Restoring herbaceous wildflower meadows possessing a native shrub layer and woody stemmed canopies, may provide many positive community attributes. When and if designed correctly, areas that may be designated to CLP(s) bring opportunity for centers of active and passive recreation. Conservation Landscape Planning utilizes native vegetation selected for natural beauty, soil stabilization, water quality improvement and habitat enhancement. CLP units may provide areas for appropriate dog walking, interpretations for environmental education (learning stations), and biological diversity in areas that may be void of positive natural beauty. This is a very collaborative process in which the Environmental Planner engages all stakeholders involved. Often times property managers refer the Environmental Planner to the appropriate HOA committee and/or designee to initiate the process.

Environmental Management Services and the application of these services to the HOA governed subdivisions maybe necessary for short and long term community sustainability, improved quality of life and most importantly, reducing long term capital expenditure from reserves. Leading your community toward environmental stewardship may prove to be most rewarding and value-driven. Therefore, selecting a qualified Environmental Planner with experience in community Environmental Management Services Planning will prove to be an asset by simplifying a multivariable and complex process based on science, regulation and innovation.

*Written by: Todd A. Fritchman
B.S., MS, Biological Science /Science Education
Environmental Professional (ASTM Standards)
Environmental Planner/President of Envirotech
Environmental Consulting*