

Watershed Management Plans Prioritization Discussion

GMP Provisions

The 2006 Evaluation and Appraisal Report Growth Management Plan (GMP) amendments set the timeline and give some guidelines for development of the plans. A prioritization of basins is to be completed by January 2008 and the plans are to be completed by 2010. Included in the prioritization process will be an evaluation of areas for which Watershed Management Plans (WMP) are not necessary based on current or past watershed management planning efforts. The prioritization is to be based on where the development growth potential is the greatest, and will impact the greatest amount of wetlands and listed species habitat. The schedule and priorities shall also be coordinated with the Federal and State agency plans that address Total Maximum Daily Loads (TMDLs).

The WMP will be developed utilizing stake holder groups for input and discussion. The Environmental Advisory Committee (EAC) will serve as the primary public committee for recommendations to the Board of County Commissioners. Stakeholder comments will be summarized to the EAC. There will be a presentation of the GIS analysis to the Stakeholder groups September 27, 2006. The schedule for the EAC Prioritization recommendation is:

- Review and discuss GIS analysis of basins October 3, 2006;
- Recommendation to Prioritize Basins November 7, 2006.

GIS Analysis for Prioritization

The watershed basin boundaries developed by SFWMD BCB and Collier County Stormwater Department are also now utilized by the FDEP for the TMDL assessment (Figure 1). These will also be used to evaluate growth potential, wetlands, and listed species habitat. I utilized the most recent data available for this analysis however, most of this data is at least 5 years old. I will include a discussion of the data limitations with each section. Each basin was ranked for each parameter considered. After all of the analysis was completed an average ranking was calculated. For the basins that extend beyond the county border the portion of the basin beyond the border was not considered in the analysis.

Growth Potential

The analysis of growth potential utilized the Collier County Property Appraisers GIS data for buildings and parcels. The combined acreage of undeveloped private parcels were used as the measure of "Growth Potential". The building data is from January 2006 making this the most current data layer. Parcels without buildings were selected and then the county, state, federal, and private conservation lands were removed. Because of future development potential agricultural lands with buildings on parcels greater than 40 acres were added back (Figure 2). Undeveloped private parcels within the conservation lands were not removed. The percent of the basin that is undeveloped was calculated and the basins were ranked by descending percentage. That is the basin with the highest percentage undeveloped land was ranked 1 (Table 1). There are portions of the Rural Fringe and the Rural Lands that have incentive programs to transfer development from

environmentally sensitive areas to less sensitive areas. Undeveloped parcels within these areas are included unless they have already eliminated their development rights.

Seven of the basins have more than 50 % developable land. Most of these are in the Immokalee area but the Gordon River Extension basin has 59% undeveloped parcels. Seven of the basins had 5 % or less developable land. Marco Island is the only urban basin in this group.

Wetlands

The USFWS National Wetland Inventory (NWI) was utilized for the wetlands analysis. The data is derived from aerial photographic analysis and is suitable for planning analysis. (This data does not include impacts of lowered water tables from canals and wells and so it is not equivalent to state or federal jurisdictional wetlands). I also did not consider wetlands in existing conservation lands in this analysis since they are not directly impacted by development (Figure 3). The Lake Trafford basin was the only basin with greater than 50 % wetlands that are not in conservation. The basins in the large Conservation Land areas had low percentages of wetlands because most of their wetlands were not considered.

Listed Species Habitat

The Strategic Habitat data from the FFWCC Closing the Gaps in Florida's Wildlife Habitat Conservation System (1994) was utilized to identify listed species habitat. This data was developed to identify lands needed to support listed species in addition to the acquired conservation lands. It was updated by removing any lands that were identified as developed by the SFWMD 1995 Land Cover data or purchased by state or federal agencies for conservation purposes (Figure 4). Faka Union North is the only basin with greater than 50 % Strategic Habitat.

TMDLs

FDEP will be identifying basins that do not meet state standards for water quality. They will present a draft list at a meeting on the Everglades West Coast Basins September 25, 2007. I will have a draft figure of the impaired basins at the September 27, 2007 meeting so that we can include this in the ranking.

Summary

The total basin acreage, the acreages, percents, and ranks for growth potential, wetlands, and listed species habitat are listed by basin in Table 1. I calculated an average rank based on the rankings of the 3 parameters considered. The order of the basins in Table 1 is based on this average ranking.

Additional data will be reviewed and evaluated prior to stakeholder and EAC presentations for comparison. If you have any questions or additional data you think should be assessed please contact Mac Hatcher (239) 213-2954 or machatcher@colliergov.net.