

MIAMI-DADE WATER AND SEWER DEPARTMENT

The Miami-Dade Water and Sewer Department (MDWASD) hereby submits the following comments regarding Water Conservation and Alternative Water Supply for the Parkland DRI application:

Water Conservation and Alternative Water Supply:

1. **The Parkland project must comply with future amendments to the Miami-Dade County Code addressing water conservation and alternative water supply. Such amendments to the County Code are presently being developed.**

Parkland will comply with future guidelines for applications to amend the Miami-Dade Comprehensive Development Master Plan addressing water conservation and alternative water supply. Miami-Dade County staff, along with selected private sector and public sector interests, currently is preparing these guidelines.

As an example of the water savings that can be provided throughout the Project, the table below represents average savings for a single-family household resulting from the use of high-efficiency water-use fixtures. Applying a conservative 20% reduction to the Project's overall water demand projections would reduce the potable water demand from 1.871 MGD to 1.497 MGD.

The sewer water treatment demand would also be reduced by the same 20%, from 1.871 MGD to 1.497 MGD, after which an additional 25% (.375 MGD) is being planned to be recaptured for treatment and irrigation, resulting in 1.122 MGD of sewer water. Thus, 1.122 MGD of sewage flow would return to the WASD system, while .375 MGD would be treated and used for irrigation.

| High-Efficiency Water-use Fixtures Vs. Presently Required Fixtures | | |
|---|--------------------------------|--|
| Single-Family Home - Indoor/Outdoor | | |
| | Currently Used Fixtures | Higher Efficiency Fixtures |
| High Efficiency Toilets (HET) | 1.6 gpf | 1.2 gallons or less on average per flush (gpf) |
| Showerheads | 2.5 gpm | 2.0 gallons or less per minute (gpm) |
| Kitchen Faucets | 2.2 gpm | 2 gpm or less |
| Other Faucets | 2 gpm | flow of 1 gpm |
| Washing Machines | 27 gallons per load | average 18 gallons per load |
| Weather-based (WB) Irrigation controllers | -- | 20% savings over conventional irrigation controllers |
| | | |
| Water-Use Savings Associated with High-Efficiency Fixtures | | |
| | | |
| Assuming 2 toilets, 2 showers, 3 faucets, 1 clothes washer and 1 WB controller - the potential savings are 22.7%. | | |
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