



# CASE STUDY



## Manatee County Jail Water Conservation Retrofit Project

Manatee County Central Jail, located in Palmetto FL, was looking to reduce energy consumption at the facility. Intelligent Conservation Systems was tasked with the water conservation Energy Conservation Measure (ECM). The facility was built in 1995 and houses 1065 inmates.

The majority of the work included retrofitting all the existing water closets, lavatories and showers in the facility.

The water utility savings were significant as showcased below. Additional savings was captured from natural gas reduction used to heat hot water.



Manatee County Jail, Palmetto, Florida

## Water Savings Results

Retrofit Fixture Type	Before	After
Inmate Toilet Avg (GPF)	3.87	<b>1.42</b>
Inmate Lavatory Avg (GPM)	1.96	<b>0.63</b>
Inmate Shower Avg (GPM)	2.75	<b>1.91</b>
Inmate Dorm Porcelain Toilet Avg (GPF)	4.03	<b>1.56</b>
Inmate Dorm Porcelain Lav Avg (GPM)	2.29	<b>0.66</b>
Inmate Dorm Shower Avg (GPM)	2.77	<b>1.94</b>
Staff Porcelain Toilet Avg (GPF)	3.57	<b>1.44</b>
Staff Porcelain Lav Avg (GPM)	2.64	<b>0.5</b>
Staff Shower Avg (GPM)	1.95	<b>1.5</b>

Total Results	Total Savings	\$ K Gal Savings	K Gal Savings	\$ MBTU Savings	MBTU Savings
Completion	<b>\$177,168</b>	<b>\$150,653</b>	<b>27,796</b>	<b>\$26,515</b>	<b>3,788</b>