

## Estimating the Value of Water Atlas Services

The Water Atlas ([www.wateratlas.org](http://www.wateratlas.org)) is designed to assist local governments with managing their water resources and meeting state and federal mandates for this management. In addition to this primary goal, the Water Atlas assists local governments by providing an on-line answer to citizen questions or concerns about the state of the resource and extensive scientific data for use in resource analysis, education and general knowledge. This report was prepared to help local government managers better understand the intent of the Water Atlas and to provide justification for local government expenditure in its maintenance. The full justification is provided in the report body. This summary provides the basic cost factors that are considered in the report.

The Water Atlas is fully maintained by the University of South Florida. The program supports 10 County atlas websites and three city partners (separate or associated agreements) as well as two national estuary program sites. Under the newly implemented “One Atlas” concept, these partners share fully in improvements made to any atlas site and through a common maintenance cost sharing plan. The One Atlas concept has resulted in savings to our partners whose basic maintenance cost is determined by the cost share approach.

If performed elsewhere, the cost to maintain these same basic web services can be readily estimated for the four maintenance tasks required for the Water Atlas and by a reasonable (though conservative) estimate of weekly effort expended. The results of this estimate are shown in the Table 1 below. The One Atlas annual cost for basic maintenance is \$25,000.

**Table 1. Value of basic maintenance of a Water Atlas website.**

<i>Category</i>	<i>Weekly Effort (hours)</i>	<i>Annual Effort (hours)</i>	<i>Hourly Salary</i>	<i>Hourly Compensation</i>	<i>Annual Salary and Compensation</i>
<b>Web Maintenance</b>	10	460	\$36.63	\$12.09	\$22,410.23
<b>Database Maintenance</b>	15	690	\$42.18	\$13.92	\$38,708.59
<b>GIS Management</b>	10	460	\$33.30	\$10.99	\$20,372.94
<b>Content Management</b>	20	920	\$22.20	\$7.33	\$27,163.92
<b>Program Manager</b>	5	230	\$48.84	\$16.12	\$14,940.16
<b>Total Management</b>	60	2760	\$183.15	\$60.44	\$123,595.84

*Note: Salary taken from salary tables for Orlando Area adjusted by National cost index for period between 2003 and 2008 and for grade considered equivalent to type of service. Compensation rate was 33%. Annual effort was determined as a 46 week year.*

The effort level for basic services includes all tasks to ensure an atlas operates properly and databases are up to date and current content is added. Most service agreements also include a “standard” service option which includes all costs for efforts expended in improving and updating the website as well as costs for maintenance of county-specific, non-spatial and spatial databases as well as county-specific content management tasks and management (USF faculty) assistance. These costs vary between partners based on the number of unique services and databases and the extent of individual databases. The average cost for these services is \$26,000. The approximate cost to perform these tasks by a county “in-house,” or by a contractor is estimated in Table 2.

**Table 2. Value of Standard Service option for County maintenance of a Water Atlas website.**

<i>Category</i>	<i>Weekly Effort (hours)</i>	<i>Annual Effort (hours)</i>	<i>Hourly Salary</i>	<i>Hourly Compensation</i>	<i>Annual Salary and Compensation</i>
<b>Web Design and Implementation</b>	15	690	\$36.63	\$12.09	\$33,615.35
<b>Unique Database Maintenance</b>	15	690	\$42.18	\$13.92	\$38,708.59
<b>Unique Database Maintenance</b>	10	460	\$33.30	\$10.99	\$20,372.94
<b>Unique Content Management</b>	10	460	\$22.20	\$7.33	\$13,581.96
<b>Program Management Services</b>	10	460	\$48.84	\$16.12	\$29,880.31
<b>Total Management</b>	60	2760	\$183.15	\$60.44	\$136,159.15

*See notes for Table 1.*

By our estimates, a county with a basic and standard services agreement would save \$208,755 by a Water Atlas agreement over local maintenance.

**Special Services.** Some Counties have special services agreements. These services change each year and are different for each partner. This final scenario assumes a county has requested our services to add one or more components to the County water atlas site. This task involves developing an new interactive component for a new County Volunteer Program and to update and existing data management program (FCCDR Cost \$ 32,000). The table assumes that the web, GIS and database work was beyond the County’s available expertise and a consultant contract is needed.

<i>Category</i>	<i>Weekly Effort (hours)</i>	<i>Annual Effort (hours)</i>	<i>Hourly Salary</i>	<i>Hourly Compensation</i>	<i>Annual Salary and Compensation</i>
<b>Conceptual Design</b>	5	60	\$80.00	\$26.40	\$6,384.00
<b>Web Design Services</b>	12	288	\$70.00	\$23.10	\$26,812.80
<b>Database Design</b>	8	192	\$75.00	\$24.75	\$19,152.00
<b>GIS Database Design</b>	4	64	\$50.00	\$16.50	\$4,256.00
<b>Program Management</b>	2	48	\$80.00	\$26.40	\$5,107.20
<b>Total Management</b>	26	416	\$275.00	\$90.75	\$55,328.00

*Note: Effort estimates are based on Water Atlas experience in similar projects. Cost estimates are based on industry standards.*

By our estimates a County with a basic and standard and special services agreement for the items above would save have a Water Atlas services agreement cost of \$121,000 and would have a combined County cost to replace these services of \$397, 661.