

Outlook

"Your project. Our passion."

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In This Issue:

**Invasive Species
Management and
Grant Funding**



**Collier County
TDR Bonus
Extension**



**TMDL Water
Quality Restoration
Grants**



**Edison State
College Achieves
LEED Silver**



**Johnson
Engineering Has
New Leadership**

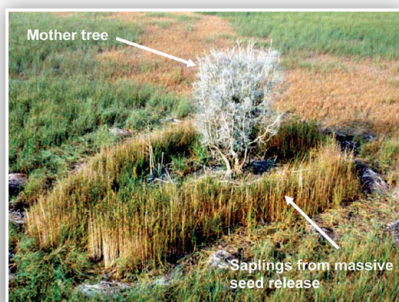


INVASIVE SPECIES SPREADING THROUGH FLORIDA

Each year thousands of non-native plants, animals, and pathogens are introduced to the United States; when these introductions become detrimental to our environment and economy they are known as 'invasive species'.

Florida is particularly vulnerable to invasive species due to our mild climates and extensive tourism, as well as being a major hub for importing goods from other countries. The economic damages resulting from invasive species costs the United States an estimated \$120 billion each year.

Although Florida bears a disproportionate burden of invasive species, understanding the biology and mechanisms of invasive species, as well as what role activities play in their spread can significantly reduce the impacts of these invaders.



A mature melaleuca tree may hold as many as 50 million seeds in its canopy. A single stressor to a tree can cause a massive release of these seeds. Timing your herbicide control and prescribed fire together can prevent the saplings resulting from this massive seed release from maturing.

Johnson Engineering's ecologists have taken a proactive role in assisting local managers, ranchers, and land owners to combat these invasive species. Through a clear understanding of what factors play a role in the proliferation of invasive species, relative to local operations and the development of an integrated management approach, the issue of invasive species can be minimized. In the past year, we have conducted invasive species risk assessments and recommendations on over 90,000 acres of land. These assessments have helped to identify high risk pathways of introduction, prioritize which species or infestations pose the highest economic risk for individual management areas, and coordinate management activities to increase their effectiveness, all of which will result in more cost effective control of invasive species.

CONTINUED ON PAGE 2

PEOPLE & PROJECTS: ON THE MOVE



Roy Chapman, P.E.
traffic engineer, joins our Land O'Lakes team. Roy brings over 40 years of experience in traffic studies and signalization projects throughout Florida.



Matt Howard, P.S.M.
has been named as Director of the Surveying & Mapping Market Group. Matt is a partner of the firm and has three decades of surveying experience.



Debi Pendlebury
principal planner, has been appointed to the Lee County Land Development Code Advisory Committee (LDCAC). She is one of 15 who review code changes monthly.



Josh Hildebrand, P.E.
transportation design team, has recently earned his State of Florida Professional Engineering (P.E.) license.



Since 2011, Johnson Engineering has also been successful in obtaining over \$350,000 in grant funding for local area preserves to develop integrated invasive species management programs. This funding has provided means for managers to implement not only traditional control methodologies such as chemical treatment, but also allows a more creative approach to invasive species management.

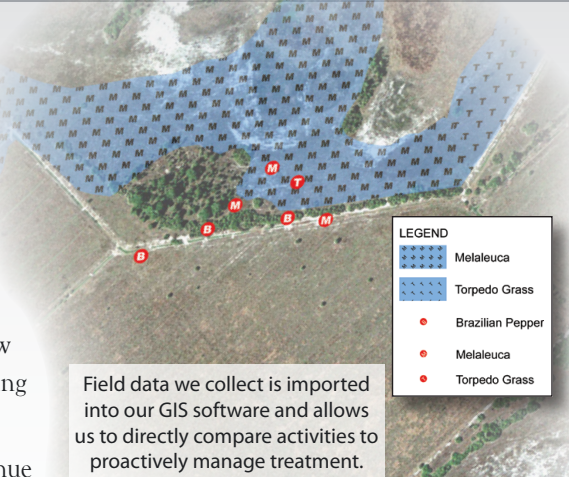
One creative approach is utilizing aerial sketch mapping, which involves mapping invasive species coverage via helicopter or fixed wing plane. Aerial sketch mapping has long been used by many agencies such as the U.S. Forest Service for mapping forest health. By now utilizing this approach for invasive species, we are able to map large tracts of land, including remote areas which are difficult to map on foot, for a fraction of the cost.

The data collected during the sketch mapping, as well as the management and revenue generating activities, are recorded using our Geographic Information System (GIS) software. By spatially recording this data, we are able to directly compare activities and consider how they may conflict with each other or spread invasive species. This is largely done through the development of a GIS model, which can prioritize treatment areas based on the infestations that pose the greatest risk to an area's assets and/or which infestations pose the greatest risk of spreading as the result of local activities. Since infestations and risks are constantly fluctuating, new infestations occur, old ones are eradicated and area activities change, the use of GIS has proven crucial in tracking trends and distribution of invasive species, as well as documenting success of management techniques.

The introduction of invasive species to an area is frequently the result of human-mediated introduction. Fortunately, to the degree human activities may promote invasions, humans are equally capable of deterring invasive species introduction and establishment through modifying activities, invasive species awareness and other proactive efforts.

The mechanisms for spreading invasive species, and how they may affect an individual project, are as diverse as our clients. By working closely with each client we are able to understand their specific needs, how invasive species uniquely affects them, and then arm them with the information necessary to reduce the costs and impacts associated with this serious problem.

For more information on invasive species assessments, management and grant funding opportunities, contact Sarah Webber at swebber@johnsoneng.com or 954.614.2075. ■



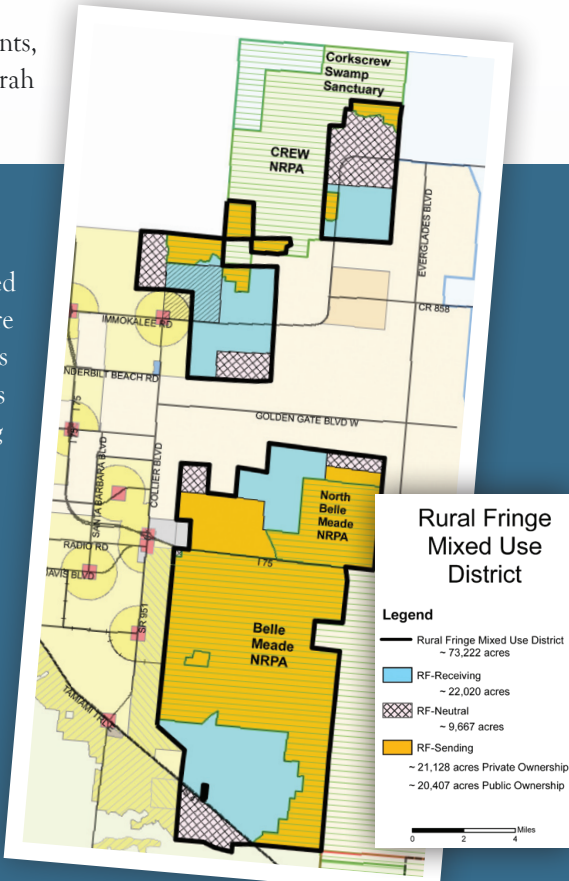
This shows how grading a road has resulted in spreading of cogongrass along the length of a road. Invasive species are easily spread from one area to another via cars, construction and maintenance vehicles and even farming equipment. It only takes a small piece of cogongrass, roughly the equivalent of 25 grains of sugar, to spread the infestation.

COLLIER COUNTY TDR BONUS EXTENSION ON THE HORIZON

Collier County has an innovative Transfer of Development Rights (TDR) program associated with its Rural Fringe Mixed Use District. This District contains over 70,000 acres that are divided into either Sending, Neutral or Receiving Lands. The designation of these lands is meant to facilitate and compensate for protection of remote or environmentally sensitive sites (Sending Lands) and promote development of property with available urban services (Receiving Lands). From the program's inception in 2002 through March 2012, an early entry bonus has been in place to encourage owners to participate in the program with additional transferrable development credits. In those ten years, almost 20% of the Sending Lands have been processed by the County for approval of development rights transfer.

In February, the Collier County Board of County Commissioners agreed to consider an extension of the early entry bonus timeframe beyond the March 2012 deadline, so this opportunity may be not be lost. The Board is set to review and re-activate the bonus in fall or winter 2012.

If you own Sending Lands or have interest in the TDR program, contact Laura DeJohn, AICP at ldejohn@johnsoneng.com or 239.280.4331. ■



TMDL WATER QUALITY RESTORATION GRANTS

The Florida Department of Environmental Protection (FDEP) administers a funding program to help local governments implement best management practices when developing stormwater treatment facilities. Projects eligible for these TMDL Water Quality Restoration Grant funds are those designed to reduce pollutant loads to impaired waters from urban stormwater runoff. Since so many of Florida's receiving water bodies are now considered impaired waters by the State, many stormwater treatment projects qualify to be eligible for the funding.

The grant applications may be submitted at any time throughout the year and are reviewed and ranked in March, July, and November annually. Projects are selected for grant funding based on these rankings and the availability of funding. Projects not selected for funding will remain in the pool of projects that will be ranked for one year from the date of submittal.

Our team has successfully assisted local governments in attaining hundreds of thousands of dollars in TMDL grant funds. We can help you get your project in position for funding by providing all the services needed including project management, grant application, design, permitting and monitoring.

For more information on project eligibility contact Andy Tilton, P.E. at atilton@johnsoneng.com or 863.612.4055. ■



DO YOU RECOGNIZE THESE WATER BODIES? THESE ARE JUST A FEW ON THE LIST OF VERIFIED IMPAIRED WATERS.

- | | |
|----------------------|----------------------|
| Bedman Creek | Long Hammock Creek |
| Bee Branch | Manuel Branch |
| Billy Creek | Naples Bay |
| C-19 Canal | Ninemile Canal |
| Calooshatchee River | Okaloacoochee Branch |
| Cocohatchee River | Orange River |
| Cypress Branch | Owl Creek |
| Cypress Creek | Palm Creek |
| Daughtrey Creek | Pollywog Creek |
| Dog Canal | Popash Creek |
| Estero Bay | Roberts Canal |
| Estero River | Rookery Bay |
| Fort Simmon's Branch | Sanibel River |
| Gator Slough | Spring Creek Marine |
| Goodno Canal | Stroud Creek |
| Gordon River | Telegraph Creek |
| Hancock Creek | Ten Mile Canal |
| Hendry Creek | Townsend Canal |
| Hickey Creek | Trout Creek |
| Imperial River | Whiskey Creek |
| Jacks Branch | Yellow Fever Creek |
| Lake Hicpochee | |

EDISON STATE COLLEGE ON THE CUTTING AND LEEDING EDGE

Who says technology can't be environmentally friendly? Edison State College has much to be proud of as their Kenneth P. Walker Health Sciences Hall, which was designed to have a minimal impact on the environment, received its Silver Certification in Leadership in Energy and Environmental Design (LEED) from the U.S. Green Building Council.

Inside the building you will find cutting edge technology designed to provide students in the nursing program optimal hands-on learning, using computer simulated medical situations. Outside may look like just any other building, but behind the scenes our civil engineers put much time and thought into the overall site design of the building, reconfiguration of parking lots, utility design, surface water management and drainage solutions. All these components played a critical role in achieving the honor of being accepted as LEED Silver Certified. We look forward to working closely with the college in pursuit of LEED certification for Building U, Building T (Collegiate High School) Expansion, Student Housing (Building W) and future buildings throughout the campus.

For more information, contact Dana Hume, P.E., at dhume@johnsoneng.com or 239.461.2471. ■



JOHNSON ENGINEERING UNDER NEW LEADERSHIP

On March 6, 2012 Lonnie Howard, P.E. became Johnson Engineering's fifth president. In 2011, Steve Morrison, P.E. announced that after he completed his 15th year term as president, he would pass the torch to Lonnie Howard.

Lonnie has worked for Johnson Engineering for 18 years and heads up the groundwater resource group. Throughout the last year, he worked closely with Steve to transition into his new role of leading the company into what he refers to as the 'solution generation'. Steve will return to his role as a professional engineer working on select projects for the firm.

The company has also named three new members of the Board of Directors; Dana Hume, P.E., Church Roberts, and Ryan Bell, P.E., PTOE.

Dana Hume, P.E., who was also appointed as the company Secretary/Treasurer, is the director of our Fort Myers land development team and has more than 22 years of experience managing development projects.

Church Roberts is director of our environmental consulting team. He is an ecologist with more than 20 years of experience working on all aspects of environmental projects. Church often serves as a liaison between clients and government officials for environmental services.

Ryan Bell, P.E., PTOE, is director of our transportation group. Ryan has 14 years of experience in both the design and construction of various transportation improvement projects. He was born and raised in Southwest Florida giving him a keen understanding and inherent appreciation for local issues.

The three will join the current Board members Lonnie Howard, P.E., Kevin Winter, P.E., Andy Tilton, P.E., and Mark Wentzel, P.S.M. to lead the company successfully into the future. ■

▲ Lonnie Howard accepts his new role of president from Steve Morrison.



◀ Johnson Engineering's founder, Carl Johnson (1946-1968)



▲ Since 1946, Johnson Engineering has only had five presidents: (L to R) Archie Grant (1968-1979), Forrest Banks (1979-1997), Steve Morrison (1997-2012), Lonnie Howard (current)



Johnson Engineering's newly appointed board members: (L to R) Dana Hume, Church Roberts & Ryan Bell

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