

**Myakka River Management Coordinating Council  
Nature Center  
Oscar Scherer State Park  
1843 S. Tamiami Trail  
Osprey, Florida**

**October 8, 2004  
9:30 A.M. – 3:40 P.M.**

Jono Miller called the meeting to order at 9:35 a.m.

**Sarasota County's Environmentally Sensitive Lands Program Update – Belinda Perry**

Since May, the county has acquired two more properties in the Myakka River Basin. The Rollins Property is 79 acres and is located on the west side of the river, from Border Road south to Blackburn Canal. A small parcel near Warm Mineral Springs, about 3/10 of an acre, was also purchased.

The county is in the process of acquiring three more sites for another 101 acres near the Myakka River. The Ligon Property, is approximately 90 acres, and is mostly north of Border Rd on the west side of the river, but some is located on the east side of the river adjacent to the Carlton Reserve. The Thompson Property is eleven acres south of Laurel Road on the west side of river. In addition, another Warm Mineral Springs parcel, less than an acre, is close to being acquired. The county hopes to close on these properties in October.

One significant property the county hopes to acquire within the next six-months is the Churchill Property. It was part of the Eagle Ridge Estates that went through several owners, it is approximately 440 acres. It is in the watershed, but not directly on the river.

**Southwest Florida Water Management District Update – Dianne McCommons-Beck**

The *Myakka River Comprehensive Watershed Management Plan* has been published. It will be on CD for team members and other stakeholders. This is the most up-to-date comprehensive watershed management plan published. A few printed copies were available for team members.

Jono inquired about the plan's use. Dianne explained that it will be used as guidance for stakeholders in decision making for activities in the watershed. It will also be used as guidance for project partners in the district's cooperative funding program. Projects submitted for cooperative funding should further goals of the action plan. Cooperative funding projects that further actions in this plan, should be looked at more favorably by the Basin Board for funding.

The meeting with the Manasota Basin Board is scheduled for the 20<sup>th</sup>. There will be an annual planning workshop with the basin board members after the meeting, to revise the fiscal year's priorities for the next year. District staff did not recommend many changes and hope to gain consensus at that workshop. There will be presentations on accomplishments of district projects and programs for the entire basin. There will be a presentation on priorities, challenges and accomplishments of our education department. There will be a presentation on the CWM Decision Support System by Dr. Steve Dick.

The Minimum Flows and Levels (MFL) priority schedule is being recommended for revision. If revised the new completion date for the Upper Myakka System MFL would be 2005; instead of 2004. The Lower Myakka System (including Myakkahatchee Creek, Deer Prairie Creek and Blackburn Canal) would be pushed back to 2006; from 2005. Data collection is the source of the delay. It was also mentioned that Cowpen Slough moved to 2007, at the urging of Sarasota County.

The new MFL schedule will be presented to the Governing Board in October, if approved the new schedule will be submitted to DEP for approval.

#### **FDEP TMDL Update – Peggy Moran**

Peggy explained that Total Maximum Daily Loads (TMDLs) “represents the maximum amount of pollutant loading that can be discharged to a water body and have its designated uses met”.

Copies of the “draft” verified list (Myakka River segments that were verified as being impaired by a given pollutant) were distributed. Several segments of the Myakka River were listed because of high coliform bacteria counts.

DEP's website for TMDLs is: [http://www.dep.state.fl.us/water/tmdl/verified\\_gp3.htm](http://www.dep.state.fl.us/water/tmdl/verified_gp3.htm)

The Myakka River is also listed for having low dissolved oxygen levels (below the state standard of 5 mg/l), but this may be a result of natural conditions and not pollution. Because of this, “Site Specific Alternative Criteria” are being developed for dissolved oxygen in the Myakka River

Bill Byle asked if there were pollutants in the Myakka River that were not being monitored through the TMDL process. Peggy responded that for some pollutants there are no state standards, so a TMDL would not be developed for them. Bill suggested that the MRMCC pursue this further.

#### **Sarasota County's Floodplain Mapping – Steve Suau**

The Myakka River Flood Study that Sarasota County is doing in cooperation with the Southwest Florida Water Management District (SWFWMD) has been completed from state road 72 down to the Charlotte County line. This section has been adopted by the Sarasota Board of County Commissioners. The study identified/established the 100-year

flood elevations, so that finished floors for any new structure on the Myakka River would be required to be built above this level. The study will also be used to evaluate new development proposals and subdivisions along the river, so they are designed to not cause flooding.

Jono asked if this means there will be no fill in the 100-year floodplain. Steve answered that if filling is done, storage would be required to offset the filling, so offsite flood levels will not increase.

Forty-one existing homes were identified, primarily in the Border Road to I-75 area that are susceptible to flooding from a 100-year storm event.

Certain flood zone designations along the Myakka River have been identified as greenways that are tied into the County's 2050 plan.

The County and SWFWMD are finishing the flood study for the Upper Myakka River which includes SR 72 up to Myakka Road (SR 780) and includes Howard Creek. Other tributaries are being looked at.

A gauge has been installed at the upper end of the Myakka River in Sarasota County near Myakka Road and Hidden River. They are getting continuous readings of rainfall and flow measurements at that location.

A gauge, which has been in place for a couple of years on Blackburn Canal at Jackson Road, measures rainfall, stage, and discharge. Two more gauges will be installed on the Myakka at Border Road and I-75. These will be used to determine the water lost through Blackburn Canal. SWFWMD is providing assistance and funding.

There was some discussion of the gauge readings being accessible with continuous updates. It is available at: <http://www.sarasota.wateratlas.usf.edu/>

### **Charlotte County Update/Manatee County Update – Bill Byle and Doug Means**

Bill relinquished his time to Doug Means as he noted that 40% of the Myakka River Basin is in Manatee County.

Doug Means mentioned that next week during the County Commission meeting the new mining ordinance will be discussed. If anyone is interested in seeing ordinances that are not online call Rob Brown at 941-742-5980.

### **Proposed Public Boat Ramp on the Lower Myakka River – Laura Kleiss Hoeft**

Laura distributed copies of an aerial photo and sketch, showing the proposed ramp and parking area on the lower Myakka River near Charlotte Harbor. The County has worked with staff from the Charlotte Harbor Buffer Preserve (now the Charlotte Harbor Preserve State Park) and SWFWMD on preliminary ideas for a boat ramp at Cattle Dock Point.

The area planned for use as a ramp and parking area is located on approximately five acres within the state park. The plan would be to have a paved two-lane road and approximately 50 parking spaces.

Laura asks Bob Repenning, Charlotte Harbor Preserve State Park (formerly the C.H. Buffer Preserve) to discuss the DOT mitigation program:

Bob stated that the property is jointly owned by Water Management District and the State of Florida and is being managed by the State Park System. Five or six years ago SR 776 in Charlotte County was widened and impacted wetlands. Two restoration projects were done in the park near the proposed ramp site as mitigation. The first is almost completed, and was an exotic removal (Australian pine).

Phase II is currently under construction. It will consist of a tidal stream, marshes, and the creation of some additional islands from spoil. The spoil is currently dominated by Australian pine and Brazilian pepper but it will be used to create false Indian mounds, these will be planted with "native" Indian mound-type vegetation on it and have an elevation of about 25 feet. From there visitors will be able to see the river and mouth of the harbor. This site is approximately 3/4 of a mile south of the El Jobean Bridge.

Bob explained that a boat ramp was identified at this site in the original *Buffer Preserve Management Plan*. If the boat ramp plan is approved they will go forward with constructing it.

Laura spoke about working with the State Park System, having a canoe launch and creating interpretive trails that would be open to the public.

The County is looking at getting input, and creating agreements with the Florida Park Service and SWFWMD. The plan is to move forward with construction drawings and permitting over the next year to year and a half. Currently, the County has \$750,000 from the sale of a road easement to the Riverwood Subdivision for this project.

Jono asked about boat registrations in Charlotte County and Laura responded that boat registration is very high in the County. The public boat ramp facilities in the county are concentrated on boats of 26 feet and under.

Chris said that one reason we had this program today is because state parks recently became the manager of this property. Since it involves recreational use it could impact the Myakka Wild and Scenic River segment even though it is several miles downstream. A boat ramp like this could not be built in the Sarasota County section of the Myakka River, because of the recently adopted *Manatee Protection Plan*. State Park District Management would like direction from the MRMCC on this proposal. The opportunity exists to include informational signage, limit boat drafts to two feet, etc.

Problems that are observed on the designated section of the Myakka include boats that are too large (deep draft) for the shallow conditions of the river, or boats going too fast.

Many of the speeding boats are coming from areas on the designated stretch of the river and zooming to Charlotte Harbor for fishing. This boat ramp as proposed might actually improve this situation by getting those people to trailer their boat versus having them speeding through important manatee habitat.

Laura added that boat ramp design can determine the size of the boat that can be launched. In Punta Gorda on a small tributary the boat ramp was designed so that it was steep enough to discourage large boats from launching. Laura left business cards with her email address for people to contact her.

Some discussion followed.

### **Charlotte Harbor NEP Update – Maran Hilgendorf**

Many National Estuary Day events are still going to be held in spite of the hurricanes, with 14 planned. There will be an event on almost every Saturday and Sunday for the next six weeks. There will be guided walks, guided canoe trips, boat tours, etc, and many are free.

Some materials were brought in at the end of the meeting: a new poster that EPA and NOAA cooperatively produced. It shows the animals that live above and below the water line throughout the country.

October 29<sup>th</sup> is the deadline for this year's grant applications. More information on grants can be found at the NEP website: [www.charlotteharbor.org](http://www.charlotteharbor.org). Micro grants for up to \$250.00, are available year-round.

Maran has been working on a calendar. Entries have been solicited from people who live in the watershed. One-hundred entries have been received from 40 people. The images are posted at the website. Visitors to the website have until October 16<sup>th</sup>, to select the images for the calendar. The calendar should be available by early December.

At the end of October the CHNEP office will move, and their server will be down for one to two weeks during this move. No one will be able to contact them by email for about a week.

The CHNEP's *Comprehensive Conservation Management Plan* needs to be updated. It was approved in 2001, and needs to be updated every five years. An article is on the website explaining the update process. The first step is asking people for input.

Three issues of concern for the program to address in the adopted plan were fish & wildlife habitat loss, water quality degradation and hydrological alteration. The updated plan will include a fourth, public education and outreach.

### **FDOT Update – Frank Meares**

Frank introduced himself. He is the government liaison to Sarasota, Manatee and Charlotte Counties. He works with the Metropolitan Planning Organization (MPO) for this area, which involves local governments, elected officials and their staff, on identifying and implementing transportation projects.

FDOT has just completed a Project Development & Environment (PD&E) study for the section of I-75 from River Road north to S.R. 681. Phil Stevens, who was present, is the project manager for the section of I-75 from River Road to the Charlotte County line. Scott McCall was present to give a quick update on the I-75 projects. Ed Ponce, FDOT Resource Engineer, is currently working on the SR-72 project, where they plan on widening the road and replacing four bridges.

Frank addressed the runoff from the I-75 Bridge, and he assured the MRMCC that FDOT understands the Council's concerns and will be looking at the problem and evaluating it.

Scott discussed that the PD&E study for I-75 from River Road to SR-681 is going into final design, and the FDOT Project Manager is Nicole Mills. The PD&E study from River Road to Kings Highway is under contract now. Phil Stevens has gotten a team together and they are starting with data collection. They have a copy of the "draft" letter (being discussed later on the agenda), and they will look at all the bulleted items. It will probably be six months to a year before the action starts.

Jono expressed concern over the widening of the I-75 Bridge by adding lanes in order to replace the deck. The concern is that those added lanes are not adequate.

In response, the existing bridge is 42'3" wide and the proposed widening will be to 60'1". This adds 18' to allow for two lanes of traffic to remain open. The bridge will be part of the PD&E study for the section of I-75 from River Road to Kings Highway. Because of this, everything from traffic numbers to water quality/quantity issues, primary, secondary, and cumulative impacts will be looked at. The PD&E study is a two-year project that runs from October 1, 2004 to September 30, 2006. There will be an official public workshop after the first year, with an additional hearing six months from then. Group members could come anytime and get an update from them and Nan Jordan, their Environmental Biologist.

Tom Moralee said that some members of the board may be confused, between the maintenance project (resurfacing and bridge widening) and the PD&E study. The maintenance project will add a third lane, add pilings in the river, and keep the bridge flat, so the runoff continues to go straight into the river.

Tom asked "how in the new project will a flat bridge that allows direct runoff to the river be designed to trap all that water from the road surface and bring it offsite for treatment?" He expressed concern that the Council will be trapped into a bridge design, because of the maintenance project. Where is the assurance to this board that this will be addressed and be taken care of 100%?

Frank explained that from what we know today, there is no intent on the FDOT's part to go in there and replace the existing bridge, when I-75 is widened. FDOT does hear the MRMCC loud and clear, and water runoff and treatment will be looked at in the PD&E study. The economic issue and an environmental issue will be addressed. He cannot give guarantees but they are certainly going to look and see if it is economically feasible to treat the stormwater runoff. After the PD&E study, during the project permitting phase DEP and SWFWMD will be involved. FDOT will continue to work with the MRMCC.

Discussion followed.

Ed Ponce, the district resurfacing coordinator, discussed the S.R. 72 project. The project limits are from Myakka River State Park east to Big Slough. The goal is to resurface the roadway and address the substandard width of existing lanes (increase the existing travel lane width from 9-10 foot to 12 foot), add a paved shoulder and guardrails, plus replace the functionally obsolete bridges.

Senator Carlton was involved in changing what was originally intended as a resurfacing project, to replacing the bridges. Currently, the Myakka River Bridge hydraulics are being studied. The bridge opening might be widened if necessary and the floodplain is also being looked at.

Jono Miller asked if it would end up more bridging (longer) and less causeway.

Ed responded that if the study shows a substandard hydraulic opening, a longer bridge would be designed.

Jono asked about esthetics of the bridge. He wanted to know about railings, which could disrupt the view.

Ed responded it was a little too early in the process to address. A high bridge is needed, so it will not be a flat slab bridge.

More comments, questions and answers followed.

### **Myakka State Forest/Wildlife Management Area Update – Tom Williams and Diane Lancaster**

Diane Lancaster, Forest Ranger, gave the update about accomplishments over the last year. This year 100 acres of South Florida slash pine were harvested. Last year 500 acres were roller chopped, with a goal of 1,000 acres for this year. Sarasota County chopped 160 acres, and planted oaks on the Winchester Tract for scrub jay habitat.

Last year 1,407 acres were burned, with 2,850 identified for this year. The burning season starts in November at the forest.

Three acres of *Lygodium* (climbing fern) were treated with herbicides. Through the combined efforts of SWFWMD and DEP 100 acres of *Melaleuca* were sprayed by helicopter in April. SWFWMD also filled in a drainage canal to help restore the hydrology of a wetland.

Road improvements are continuing and ongoing. A double campsite was added to the Flying A Campground for a total of six campsites. Four additional double sites are planned, to allow use by families and groups.

The archery and shotgun hunt is coming up. The Sarasota Canine Group had 6,813 hours in training at the forest last year. Local citizen volunteers worked a total of 144 hours last year.

Finally, a new office should be ready in 60 days.

Questions and answers followed.

Bill Byle expressed concern about lead shot being used near the river. Shot can go a fair distance, and he was concerned that manatees could eat the shot.

Jim Beever explained how easily *Lygodium* is spread. It has been transported on construction equipment, windborne spores, and in non-sterilized mulch. Jim encouraged the rapid treatment of *Lygodium*, to prevent the carpeting of natural areas by this weed that Southeast Florida has experienced.

### **Myakka River Basin Restoration Mapping Project – Jamie Scudera, CHEC**

The MRMCC was informed that Betty Staugler is no longer with the Charlotte Harbor Environmental Center (CHEC.) She is now working as the Charlotte County agent for the FL Sea Grant Program.

The Restoration Needs Assessment is being developed by CHEC for the CHNEP and SWFWMD. It is a GIS data base that addresses the restoration needs for a watershed. The Myakka River basin, Charlotte Harbor, and Lemon Bay have been completed. Work is being done on the Charlotte County section of the Peace River, with the rest of the river to follow.

Land managers and others interested in restoring hydrology, fish and wildlife habitat, and water quality, are targeted as participants for each basin. Restoration projects are identified on USGS topographic maps and County Platt Books; these are put in a GIS mapping database with a project description.

A PowerPoint presentation was made showing an example of a Myakka River project in the database. This database should allow for the rapid identification of projects when funding opportunities arise. The goal is to keep mitigation in the same watershed as the impact. Seventy-eight projects within the Myakka River basin were identified.

### **FWC Myakka River/Salt Creek Manatee Research Update – Margie Barlas**

Margie and Lucy Keith are no longer at the field office in Port Charlotte. Deirdre Grant is the new contact person at the field office. A PowerPoint Program was presented.

Manatees rely on warm water from natural and industrial sources to thermo-regulate their bodies during cold periods. Identifying, characterizing and protecting these sites have been part of the Florida Manatee Recovery Plan. Natural warm water sites are likely to become critical in the future with the retirement of older power plants, and the possible deregulation of the electric utilities in Florida.

Warm Mineral Springs is a 237-ft deep, natural, hot spring. It drains into Salt Creek which runs through residential neighborhoods to the Myakka River. Manatee use of Salt Creek was kept a secret by local citizens until Tom Pitchford, FWC, explored the area in 1993, and documented manatees using this warm water site.

Four sites along Salt Creek have been identified where manatees aggregate, all are north of the US-41 Bridge over the creek. The first site is at Santa Rosa, downstream of a weir that prevents manatees from going all of the way to the spring.

Following this discovery in 1993, biologists at the Southwest field lab decided it would be a good idea to monitor the area

Four objectives were identified for study. The first was to characterize manatee attendance patterns in relation to environmental factors. The second was to determine the network of warm water sites used by the manatees. The third was to characterize their foraging trips, how far they go to feed, identifying their primary sites and looking into the environmental factors that determine the time they feed. The fourth was to determine if dependant manatee calves would return as independent sub-adults indicating that manatee cows teach their calves of the location of warm water sites.

The first two objectives were discussed:

During the first objective, pictures were taken of the manatees in Salt Creek, and they were catalogued if all aspects (head, back, sides, and tail) of an individual were photographed. Cataloguing is important in identifying manatee site fidelity.

The second objective involved tagging four adult manatees for three years, started in the winter of 2000-01. As part of the project each year, five to seven manatees were caught, and all received health assessments. A receiver station in Salt Creek recorded the tagged manatee's presence every 30 minutes from January through April of each year. Tagged manatees were also tracked by satellite when they were outside of the creek.

The field season for Salt Creek is from November 15 through March 15 (time of year when manatees seek warm water). During the years 2000-2003 approximately 50% of

the total field season days were sampled. Manatees were present in Salt Creek during field sample days 80% of the time.

**Manatee Attendance** - as expected, manatees moved into the creek whenever ambient water temperatures dropped. The data collected indicated that the temperature remained relatively constant in Salt Creek, so manatees had a reliable warm water source.

**Manatee Movement** - factors that could influence a manatee's entrance into or exit from the creek. They wanted to see if the manatees were coming in during the day or coming in during the night. From the receiver station data, tagged manatees moved into the creek more often at night. To get to the three main aggregation sites, there is a narrow travel corridor where manatees have to swim in single file. There is a history of manatee harassment throughout the area, so it is speculated that manatees could be using the cover of night to get through safely. The foraging information and satellite data have not been looked at so it is unknown what role travel to and from the creek plays.

Tide was looked at. Manatees moved more often during a rising or high tide. This supports field observations. A sandbar under the US 41 Bridge is exposed at low tide, and manatees cannot get in or out during that time period. To thermo-regulate manatees have to be aware of the temperature and the tide levels.

From the winter of 1993-94, the first season counting manatees, there were 33 different individuals identified, with a high single day count of 18. From this study, so far, 148 different individuals have been identified in Salt Creek with a single day high count of 74 individuals. Births, immigration from other sites, and temperature (cold winters versus warmer ones), can account for the increase in the use.

The data show that the same animals come back year after year, indicating site fidelity. When looking specifically at individuals, who are catalogued and tagged, 80% have never been seen in any other warm water site. For these individuals this might be their primary place for warm water. Salt Creek is the only natural warm water site in Southwest Florida; all of the other sites frequented by manatees in Southwest Florida are artificial sources of warm water (discharge from power plants).

Additional research is planned for the future on environmental factors that may affect the manatee.

### **Myakka River Biologist's Report – Chris Becker**

Chris distributed copies of his Biologist Report and showed a PowerPoint presentation of river trip highlights.

### **Lunch Break**

### **Update on the Wingate Creek Phosphate Mine - Rosemary Garcia – Cargill Fertilizer LLC**

The mine is located in Eastern Manatee County, north of S.R. 64 and Wingate Creek State Park.

Cargill acquired the Wingate Creek Mine in March of 2004. Cargill's mentality has always been that the biologist begins the permitting, oversees the reclamation and insures the criteria are met – see the project through from planning until after the mine is released.

Currently the Wingate Creek Mine is around 3,000-acres, and approximately 686 acres were mined by the previous owners.

Manatee County has approved Cargill's Master Mines Plan. There are certain things that have to be done before the mine starts up. First, a ten-foot-tall berm needs to be constructed to segregate the mine from the Winding Creek Residential Development. The top of the berm will be planted with wax myrtles, the sides with South Florida slash pines, and the base with live oaks. Cargill is not allowed to change the flow pattern of the Myakka during mining or the reclamation operations.

Of the 686 acres that have been mined, the previous mine owners, re-vegetated 481 acres. Of the 481-acres, 295 acres have been reclaimed, re-vegetated, and released. Within three years, everything that was mined by the previous owners will be reclaimed.

Cargill is extremely involved with wildlife, wildlife surveys, and making sure work stays outside protected zones (least terns and indigo snakes were mentioned).

Cargill understands the MRMCC's concern. The hope is that mining operations will be invisible to us, and efforts are underway to make mining a temporary situation with a goal of returning the land back to something useful. Very stringent best management practices will be utilized, but they are not a 100% guarantee; mining operates with some risk. Cargill will meet permit conditions, and water quality standards.

Spillways around the one clay settling area located at that mine have been improved and upgraded.

Rosemary is currently upgrading the Conceptual Reclamation Plan, so it will be in complete accordance with what was submitted to Manatee County.

Chuck Downs asked "where do they get their water?" Rosemary replied that the mine recycles water.

Tom Moralee asked about the huge clay settling areas. Will there be one or two on the property?

Rosemary responded about the existing one, with no plans for another. The height limit is 30-35 feet, and the clay settling area could be expanded laterally with subsequent

mining. Every engineered, clay settling area has a ditch system around it, which is bermed on the outer side so there is the wall of the dam, then the ditch and then another berm.

**Roll was called and it was determined that a quorum was present.**

**Diane McCommons-Beck moved to approve the Minutes, Jean Ost seconded. Belinda Perry had one correction which was noted. The Minutes were adopted.**

### **Report on Chairperson's and Vice-Chairperson's Activities – Jono Miller and Jean Ost**

Jono has been involved with a number of things including the meetings with FDOT regarding roadways, Water Planning Alliance, initiated talks about the rest area in connection with public property north and south. Jono added that there have been interesting observations documented in the river including an American crocodile. Mote Marine Lab confirmed sawfish sightings in the river.

Jean Ost reiterated what Maran said earlier about the Charlotte Harbor National Estuary Program, including the new poster. The Jacaranda Public Library addition (12,500 square feet) was opened Saturday the 2<sup>nd</sup>, and in January the Charlotte Harbor National Estuary Program sponsored "native plant walk" will be opened at the library.

### **Election of Officers**

**Maran Hilgendorf nominated Jean Ost for Vice-Chairperson. Chuck Downs seconded. Jean accepted the nomination. Jean was unanimously elected as Vice-Chairperson.**

**For Chairperson Dianne McCommons-Beck nominated Dr. Mary Jelks who was not present (The MRMCC agreed to ask Mary if she would be willing to serve next year). There was no one who seconded the motion. This motion died.**

**Maran Hilgendorf nominated Jono Miller as Chairperson. Suzanne Cooper seconded. Jono was unanimously elected as Chairperson.**

### **MRMCC "Draft" Letter to FDOT Concerning I-75/Myakka River "Planning Area" – Chris Becker**

Copies of the draft letter were available. Two meetings were held to draft this letter, since the last MRMCC meeting in April. Dr. Estevez helped guide the draft through his work on a visioning statement for the I-75/Myakka River area.

The letter identifies stormwater, lighting, habitat, flood control, water conveyance, noise, recreation and education as components for FDOT should consider during planning and development of a wider interstate.

**Jim Beaver moved to officially send the letter to FDOT. Tom Moralee seconded. The Motion carried.**

**Minimum Flows and Levels Update – Jonathan Morales, SWFWMD**

Last time Jonathan spoke to the MRMCC he gave an overview of the minimum flows and levels (MFLs) program for the Myakka River.

For the MFLS in the Myakka River Watershed several ecological studies are being conducted to determine what happens under different flow conditions. During **low flows** - fish passage and wetted perimeters are the criteria to protect. During **medium flows** – woody habitat and “critical” fish habitat are the criteria to protect. Then finally for **high flows** assessments are being done on wetland vegetation structure, floodplains, and hydric soils.

The MFLs are being looked at from a habitat based standpoint – a whole flow regime being required, as opposed to the concept of setting a single low minimum flow. The entire flow range is required to protect from significant harm taking place in the entire watershed.

Jonathan referred to information from a PowerPoint program that showed graphs and a preview of the Alafia River MFL Report. It could not be replicated here.

A preview from the Alafia MFL Report shows a comparison of the ecological data against the historical flow patterns on the river. Example: The daily median flows over the entire period of record, from day 1 (Jan 1) all the way to day 365, shows the annual cycle of flow patterns, which is the physical flow pattern over an annual cycle occurred on the Alafia River. This will be done for the Myakka River.

For each river the flow required for fish passage and maintenance of the wetted perimeter is determined. This flow should not violate the historical low flow.

During the wet season when flows increase and the river inundates its floodplain. The amount of water is determined to sustain the flooded wetland community.

Lastly, in-channel flows, inundation of woody habitats, and optimum fish habitats are determined.

Data collection is underway for upper Myakka River high flow parameters, which should be complete in November. The “draft” upper Myakka River MFL report should be available for peer review in March 2005, and adoption in August 2005.

Jono asked how many rivers in the SWFWMD’s 16-county region have no base flow, and typically have days each year with no flows similar to those documented for the Myakka River.

Dianne McCommons-Beck responded that most in the southern part of SWFWMD (Peace, Myakka River, and Little Manatee River), during extreme dry seasons have no flow in the headwater areas. Rivers in the northern part SWFWMD typically have flows.

Questions and answers followed.

Jim Beever stated that FWC is very unlikely to be comfortable with a no-flow MFL.

### **Changes in Myakka Dry Season Flows – Jonathan Morales SWFWMD**

Jonathan summarized findings from the recently published draft report *Florida River Flow Patterns, and the Atlantic Multidecadal Oscillation* authored by Dr. Marty Kelly, SWFWMD, Ecological Evaluation Section. A few copies of the “draft” report were available and Jonathan indicated that the report was under peer review.

USGS stations provided the long-term flow data. The two long-term stations on the Myakka River are located in Myakka City at S.R. 70 and in Myakka River State Park near S.R. 72. As part of the MFLs study, USGS establish two short-term gauges on the river (approx. two years old).

When looking at long-term flows in Florida, two seasonal river flow patterns become apparent. First there is a “Northern River Pattern” with most of the flows in the spring and diminishing flows the rest of the year. In our part of the state, we have a “Southern River Pattern” with flow increasing during June/July, at the start of the rainy season. Flows taper-off sometime in late November, with the lowest flows occurring in the summertime, and medium flows occur in the spring.

For the most part the magnitude difference for the northern river pattern and southern river pattern is equal. They just happen at different times of the year. Some rivers exhibit a bimodal flow pattern with high peaks occurring in the spring and also the wet season, for example the Santa Fe River.

Dr. Kelly looked at all the flow records, especially ones over 30 years, and he developed this distribution pattern of where these flow types are occurring. The northern river pattern is seen mainly in the panhandle, and the Withlacoochee River (northern near Pinetta).

The bimodal pattern occurs around the Gainesville area. In our area (southwest Florida) we have the typical southern river pattern. Because of anthropogenic changes (ditches, canals, water control structures), areas of the South Florida Water Management District have an altered flow pattern.

The second point is that there is a multi-decadal flow difference in the river patterns. These flow differences are mostly consistent with multi-decadal oscillations. NOAA or USGS has been recording sea surface temperature out in the Atlantic Ocean for close to

150 years. Atlantic multi-decadal oscillation is described as a periodic warming of the Atlantic Ocean by 0.4 degrees C. It occurs for over several decades (30+ years), with the last warming starting around the late 1920's and ending in the 1960's. Then temperatures dropped down again.

When the Atlantic Ocean warms, most of the US receives lower than normal rainfall. The Mississippi River varies in flows by only 10%, but Lake Okeechobee varies by as much as 40%. The Florida Peninsula is an exception and receives more rainfall during these periods. Irregardless of the El Nino we still see higher flows.

Does the Myakka River exhibit this variation in multi-decadal flow? From 1940 to 1969 we see the classic southern river pattern (during an El Nino warming). Flows go up as much as 1000 cubic feet per second (cfs), daily, during the wet period. From 1970 to 1999/2000 those flows dropped from 1000 cfs to as low as 600 cfs during the normal wet season. There is a multi-decadal flow difference on the Myakka over these 30-year time intervals. (El Nino is built into this.)

Clarification and discussion occurred regarding the El Nino and La Nina effect. Jonathan stated that there is still an appreciable change over the 30-year multi-decadal flow difference with the two effects included.

Graphs were shown of the Hillsborough and Withlacoochee Rivers showing higher flows during the last warming 1930-1969 versus recent flows 1972 to 1999 (lower Atlantic temperatures).

The pattern for the Myakka River is different, at the S.R-72 gauge, during the recent dry period flows are higher than during the previous Atlantic warming period. The standard pattern still occurs during the wet season. This is not consistent with all the other rivers in Florida.

Different types of flows were compared on the Myakka River. The 90% exceedance flows, are flows that are exceeded 90% of the time, and for the most part are considered low flows. If all low flows are plotted from the period of record, yearly, the pattern shows a typically zero flow during the dry season. But it seems to be increasing from the 1970s onward. Our dry season flows have increased by as much as 25 to 50 cfs. Prior to the 1970s, zero flows in the Myakka River were typical for 30-60 days per year.

The increase in flows correlates to land use changes in the Flatford Watershed, with agricultural row crops acreage increases and irrigation over the last 30-year period.

Other rivers appear to have the same agricultural inputs and resulting increases in dry season flows include the Little Manatee River, Joshua Creek and the Manatee River.

To summarize: Myakka River dry season flows have increased over the past 30 years. The increasing trends run counter to expected climatic influences on river flow patterns. Increases in agricultural runoff are the probable source for increased dry season flows.

Jim Beever added that this affect is being observed in the Estero Bay Basin, but the source for the water is golf course irrigation and not agriculture.

### **Water Planning Alliance – New Source Projects in the Myakka River Basin – Susan Hochuli**

Susan is a water resource planner for the Peace River/Manasota Regional Water Supply Authority (WSA). The WSA is the contract administrator for an organization called the Water Planning Alliance WPA. Information on the WPA was distributed.

Membership on the WPA includes 13 governmental entities in the four-county area of Charlotte, Desoto, Manatee and Sarasota County. Its roots came from the drought 1998-2000. Cooperation among local governments on water supply began in the summer of 2000, and grew when elected officials merged into the WPA in late 2001. The WPA is a voluntary effort, and is not legally binding in any way. It is meant for local governments to cooperatively work together towards long-term water supply solutions.

The major municipalities with the four-county area are Arcadia, Bradenton, North Port, Palmetto, Punta Gorda, Sarasota, Venice as well as Long Boat Key and also the Englewood Water District. (13 total members). One of the WPA's first efforts was to petition the federal government to do an environmental impact assessment of the Peace River Basin.

The WPA's next effort was to come up with a plan to look at long-term water supply. The WPA has a Board of Directors (Board), consisting of one elected official from each of the 13 entities. The Board determined a need for assistance, so a technical advisory committee (TAC) was developpe. The TAC consists of county administrators, city managers, or other designated representatives.

The WPA is funded through county assessments to the Water Supply Authority.

The WPA decided to work on a plan for long-term water supplies. A scope of services was developed and a consultant was picked from submittals received. The plan is called the *Regional System Planning and Engineering Study* it identifies long-term water supplies needs and ways to meet those needs. A two-phase approach was taken, with the first phase looking at existing water systems in the region: the waste water systems, reclaimed water systems, projected increases in water demand, water conservation programs, capitol improvement programs, as well as current and future regulations (MFLs and TMDLs laws that affect how water systems operate). The information was compiled as supplies versus demands (graph handout). On the graph, the red line represents the cumulative demand that the 13 entities have over the next 20-year period (started in 2003 carried to 2023). Around 2018 the demand line for water will exceeds the current supply line for water. This represents a regional need for future water supplies.

Not all of the government's water systems are interconnected. Having an interconnected regional system (potable water and reclaimed water) could certainly go a long way towards meeting the demand for water supplies.

Phase II of the project was to identify potential sources of water supplies to meet the future demand in 2018. Information was collected on water resources projects, reclaimed water projects, and conservation projects. Information came from a variety of sources.

The TAC membership was expanded to 26, and includes a few agencies and stakeholders. Agencies asked to participate, include three regional planning councils, the three estuary programs in our area, The Myakka Conservancy, SWFWMD, and DEP. Water users, FPL and the Florida Institute for Phosphate Research, were advised to attend. Another water alliance was formed upstream in the Peace River Basin including the four-county area of Highlands, Hardee, DeSoto and Polk County, have participated.

Ideas for water supply sources include SWFWMD documents, most notably the *Regional Water Supply Plan*, member governments, and Capitol Improvement Programs.

A long list of projects was created. These were pared down to 15 projects with criteria developed by TAC. The "short list" of water supply sources includes projects involving Myakkahatchee Creek and Tatum Sawgrass. A planning level study is currently being conducted. The product is a planning level document, with different choices to be considered for developing water supplies. It is not binding in any way.

During the evaluation of these project concepts, the TAC will be involved with reviewing them in the next month or so. Then it will go to the Board for review and consideration for approval as a draft list. The Phase II report will then be prepared. The next MRMCC meeting is before the draft potential planning level options go before the Board, so this would be a good time for an update.

Final approval of the conceptual projects is not expected until late in the 1<sup>st</sup> quarter of 2005.

The issue of governance; who would own, who would operate, who would fund, who would receive water, who would supply water has come up. The Board determined that it was best to first identify a water supply need, and potential solutions.

Ken Alvarez stated that the graph needs a line showing how various water conservation projects could modify the projected need.

Susan agreed that there is room for improvement on the conservation projects. It has a definite measurable effect, but that can come from the individual government.

Diane McCommons-Beck stated that last year there were new legislative requirements for local governments to develop a 10-year water supply plan as part of their comprehensive plans. Many local governments involved in the WPA have already developed 10-year

water supply plans and have sent them through the SWFWMD and DCA for approval. If incorporated into a comprehensive plan, changes are done to the potable water elements, water facilities elements, capital improvements elements, and environmental elements. SWFWMD in reviewing, coordinating, and assisting in development of plans, has emphasized conservation and reuse programs. Many local governments are seeing it as a potable water facilities plan, but are being told to not look at it that way. Look at it like a water supply plan, add reuse and conservation, because it is actually part of the water supply, and offsets potable water.

Charlie Hunsicker, Manatee County, talked about the Tatum Sawgrass Reservoir Project.

The Tatum Sawgrass proposal originally was three separate ideas. The first was to use the Tatum agricultural fields and dikes that keep the Myakka River out and reconfigure them so they would hold water in. Excess flows of the Myakka River or in combination with excess flows from the Flatford Swamp upstream would fill be used for the reservoir. Water from the reservoir would be used by agriculture to meet their irrigation needs. This concept is no longer going to be pursued as water supply.

The idea being pursued instead is the creation of an off-stream reservoir to be utilized strictly for potable use, with the water being made available to the WPA. This is the most efficient use of the water. It would cost around \$2.00 per thousand gallons.

Within the geography of the Tatum Sawgrass area, with the farms and the dikes systems, and impacted wetlands, there is certainly room to create an impoundment for drinking water purposes, and half the area could be restored to recreate the wetlands. If there is a public works project, it should be one to create a drinking water source and restore the wetlands.

Teresa Connor, Sarasota County, spoke about water conservation in Sarasota County. Ten years ago the county's average water consumer used 150 gallons of water per capita per day. Through conservation measures this has been reduced to 88 gallons/capita/day. The typical home requires the use of 70 gallons/capita/day. The average use in Florida is around 180 gallons/capita/day. Some of our neighbors to the south are using 600 gallons/capita/day.

Steve Suau, Sarasota County, suggested that it would be beneficial to consider forming a task group from this council to work through the water issue. The expertise from this group in hydrology, biology, and chemistry, could identify and develop a more sustainable water solution for the river's natural systems. It could address water quality, water supply, etc. There is a lot of expertise on this council, and Steve thought there would be merit to working through this, because it is not just about developing a water supply, but about managing a watershed.

There was further discussion.

Jim Beever mentioned that the FWC could review the water supply list and thereby shorten it.

Paula Benschhoff was concerned about land acquisition when there were no willing sellers.

Discussions continued about the group to be formed.

Jono asked if the council wanted another interim meeting of the council, or if the group would prefer Charlie Hunsicker, Steve Suau, and Chris Becker to work together.

It was decided that prior to the next meeting in December the above people (plus, those on the interested signed-up sheet) will convene to look at the big picture -- opportunities and challenges -- within the Myakka Basin, including Cowpen Slough and Blackburn Canal that actually effect what water is reaching the estuary at the mouth of the Myakka River. They will provide some preliminary thoughts at the December meeting.

Ken Alvarez spoke up wondering if there should be some sort of statement from the MRMCC about concerns of what detrimental effect the withdrawals would have on the well-being of the Myakka River.

Bill Byle, Charlie Hunsicker, and others, left the room to work on a statement for the council to vote on.

**Jono read the statement to be sent to the Regional Water Alliance:**

**We strongly encourage the Regional Water Alliance to prioritize potential water supply projects that incorporate environmental values that insure the protection of the natural system of hydrology and ecological integrity of the Myakka River system.**

**Bill Byle moved to have a letter sent to the Regional Water Alliance.**

**Chuck Downs seconded the motion. Dianne McCommons-Beck abstained. The motion was passed.**

**Howard Creek Dredging Violation – Kelly Pluta**

The Oakford Subdivision (5-acre lots) is located east of I-75 on Fruitville Road.

Residents in Oakford decided to improve drainage through the subdivision, so they rented a backhoe to dredge the existing (Indian Creek/Howard Creek) channel and slough system. The area had previously been dredged in the 1940s by Lat Turner. The Oakford resident's intention was to clean out the channel by doing maintenance dredging, but they went beyond maintenance by widening and deepening the ditch.

Site visits and flyovers were done to document the violation. SWFWMD is also finding violations. The dredging went beyond the Oakford Subdivision boundary, so additional property owners (City of Sarasota and Hi Hat Ranch) were also cited for the violation. There are two code enforcement cases; the first identifies the City of Sarasota as the property owner and Oakford as the user. The second case identifies Hi Hat Ranch as the owner and Oakford as user.

From the standpoint of Sarasota County, excavation was done beyond the scope of maintenance therefore authorization, and a permit was required. Wetlands and floodplain were impacted, and a lot of the spoil remains in the floodplain. Fill has also been placed around the base of trees.

All these are violations of County codes, which require correction, permitting, or a combination. Oakford has hired consultants and attorneys. One plan shows the construction of a lake or pond, as floodplain compensation for the spoil.

Oakford is not moving quickly on a wetland restoration plan. Concern has been expressed by residents downstream in Myakka Valley Ranches about turbidity, but this has not been documented. Oakford installed silk screens and turbidity curtains as stopgaps to control sedimentation and it seems to be working.

Questions and answers followed.

### **New Business**

- Bill Byle stated that this group should have a position on manatees having access to the spring. He suggested MRMCC encourage the restoration of the channel under the US 41 bridge at Salt Creek for manatee passage.

Jim Beever explained the need for further study, because the bar might be important in keeping temperatures warm where the manatees congregate.

- Bill also raised concern about lead shot from hunting at the Myakka State Forest, and the potential for manatees to ingest it. Should this group express concern?

Jono suggested inviting a representative from FWC to discuss the status of shotgun shot in Florida, and implications on hunting at the State Forest.

Jim Beever stated he would gather some information and perhaps present it.

- Bill stated that the MRMCC needs a better understanding of phosphate mining activities in the watershed.

Jono asked for a presentation by the Bureau of Mine Reclamation at the next meeting. Chris Becker agreed to try to schedule it on the next agenda.

- Jim Beever announced that his and Bill Smith's, FWC office was destroyed by Hurricane Charlie. Many important documents were lost, and he asked for help in replacing them, especially materials from Manatee and Sarasota Counties, such as, recent comprehensive plan documents. Jim is currently housed at the Southwest Florida Regional Planning Council office. Bill Smith is currently located at the Terra Ceia Aquatic Preserve.
- Jono announced that on the 13 of October from 5:30 to 7:00 pm a meeting will be held on preliminary ideas for new roads and thoroughfares that may cross the Myakka and Peace Rivers.

**The next meeting will be December 3, 2004 at Oscar Scherer Nature Center.**

**Chuck Downs moved for adjournment. Jean Ost seconded. The meeting ended at 3:40 pm.**

**Members in Attendance**

Doug Means	Tom Williams
Maran Hilgendorf	Jeff Thirlwall
Dianne McCommons-Beck	Jim Beever
Javier Vargas	Don Caillouette
Chris King	Chuck Downs
Bill Byle	Tom Moralee
Frank Mears	Peggy Morgan
Suzanne Cooper	Jean Ost
Belinda Perry	

**Others in Attendance**

Chris Becker	Charlie Hunsicker
Judy Meents	Stephanie Meents
Paul Benshoff	Susan Hochuli
Kelly Pluta	Steve Suau
Diane Lancaster	Laura Kleiss Hoeft
Jonathan Morales	Teresa Conner
Bruce MacLeod	Rosemarie Garcia
Kevin Claridge	Ken Alvarez
Jamie Scudera	Ed Ponce
Chris Piazza	Scott McCall
Deirdre Grant	Phil Stevens
William R. Smith	Diana Donaghy
Margie Barlas	



