



CONSERVANCY  
of Southwest Florida  
OUR WATER, LAND, WILDLIFE, FUTURE.

Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

**Bonita DRGR:**

*Potential Next Steps and ABM Participation*

*June 8<sup>th</sup>, 2015 – Agency on Bay Management*

*Nicole Johnson, Director of Governmental Relations*

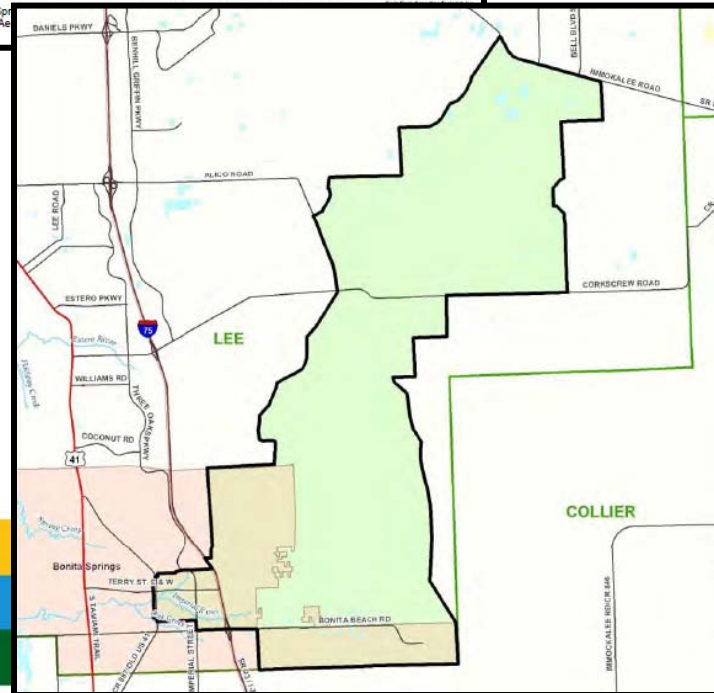
# BONITA SPRINGS DRGR

- Approx. 4,700 acres
- Subject of more than 20 studies in past 3 decades
- General consensus that improvements to water resources need to be made, but divergent opinions on how this should be done
- Whether or not density should be increased in the Bonita DRGR has been the focus of debate

Functionally part of adjacent Lee DR/GR  
Within Imperial River Basin of the  
Estero Bay Watershed (excluding far  
western side)



Figure 1: Bonita Springs  
Boundary 2013 Aerial



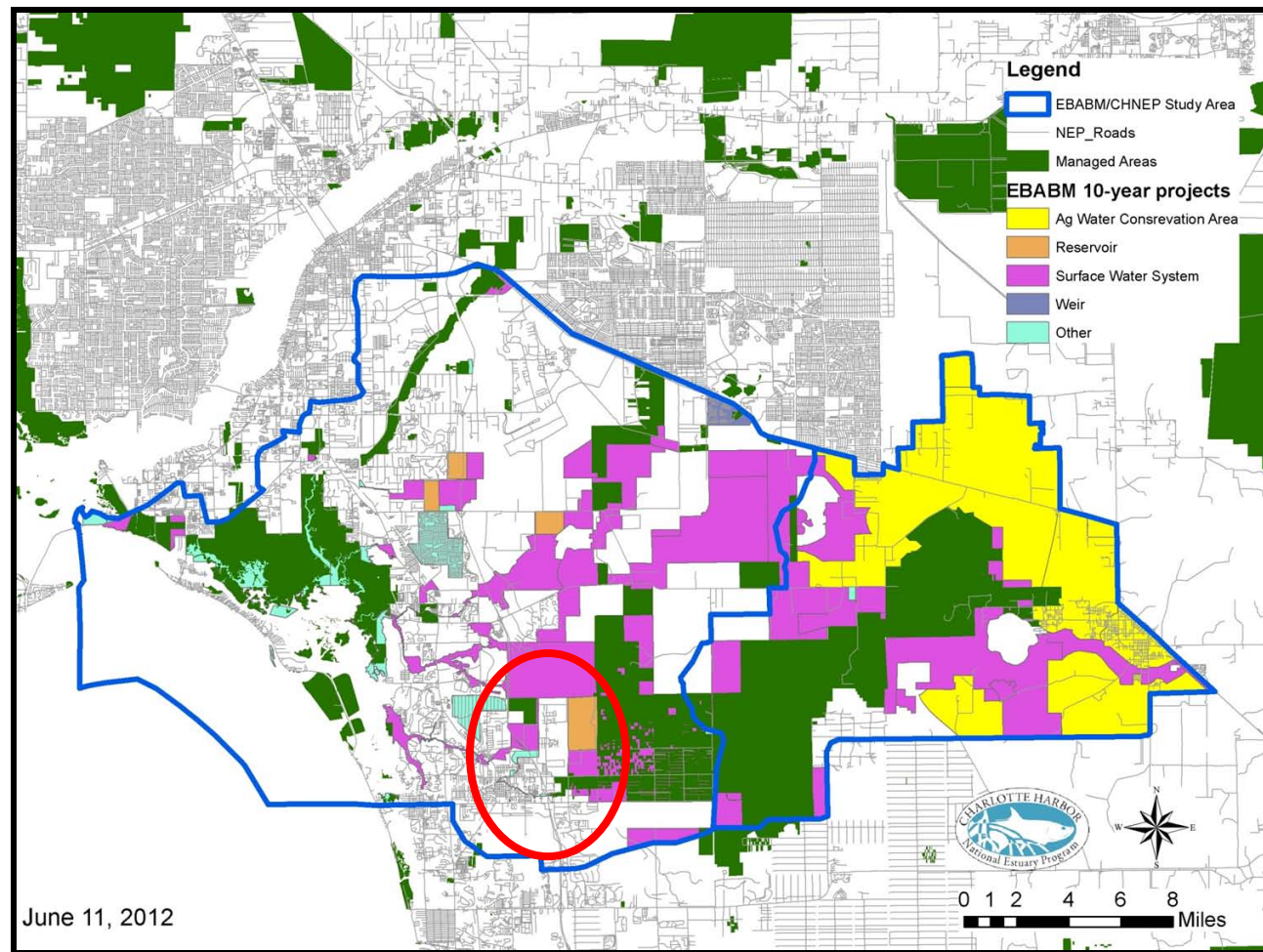


# NEXUS WITH ABM

What happens in  
Bonita DRGR impacts  
the Estero Bay  
Watershed

ABM 10-Year Work  
Plan (2012)

Identified the need  
for additional water  
storage and filter  
marshes



Source: ABM 10-Year Work Plan PPT

## ABM Recommendation

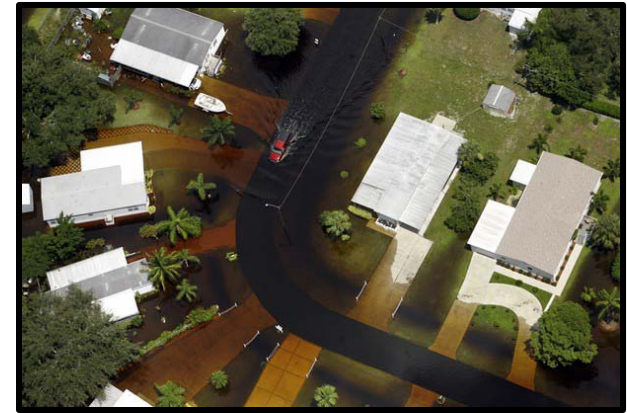
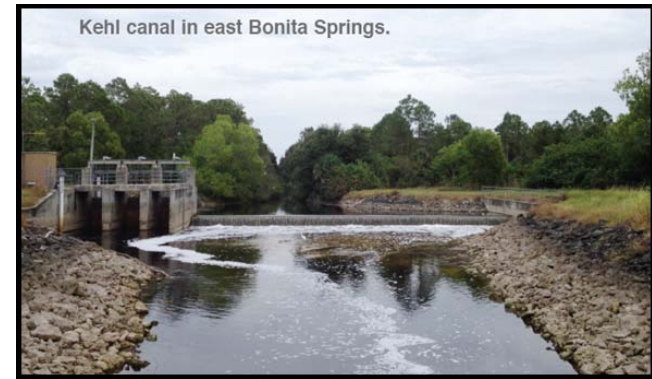
Bonita Grande Mine – Acquire and construct  
storage reservoirs and filter marshes



# IN BONITA DRGR, IT'S ALL ABOUT THE WATER

## Challenges:

- Flooding
- Water quality impairment in Imperial Basin
  - Impaired for TN
  - TMDL requires reduction by 26.5%
- Hydrologic alteration



## WHY IS THIS IMPORTANT?

Bonita DRGR provides significant groundwater recharge

2005 Rawl Report states, “the leakance through the Bonita Springs Marl is significant.”





**Recommendations from 2013 Barraco Study, including consideration of allowing 6,300+ additional units in the Bonita DRGR, resulted in public outcry to “Get the Water Right!” as the first and most important step**

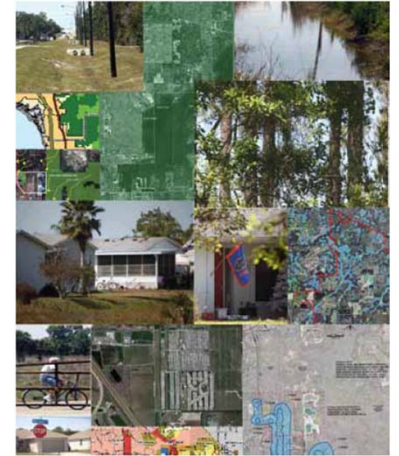
**In response, Council voted to create the Citizens Water Strategy Task Force and instituted a one-year moratorium on comp plan amendments in the DRGR**

**Moratorium has expired**

## **THE NE QUADRANT LAND USE PLAN**

Prepared for:  
The City of Bonita Springs

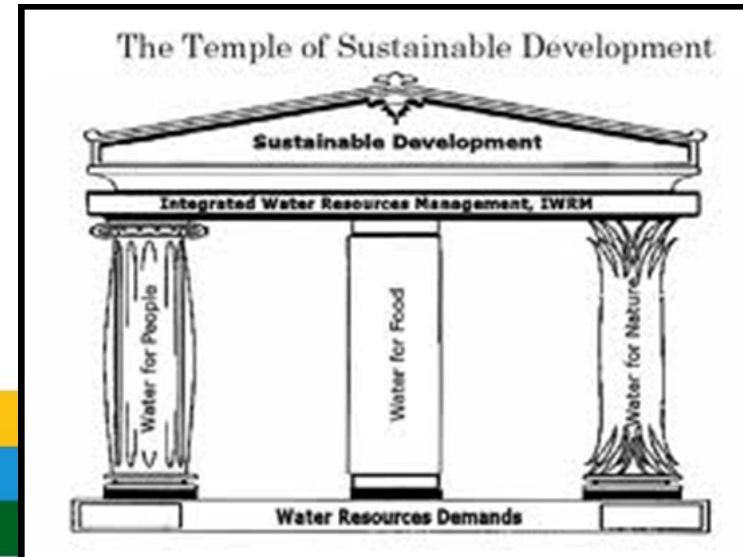
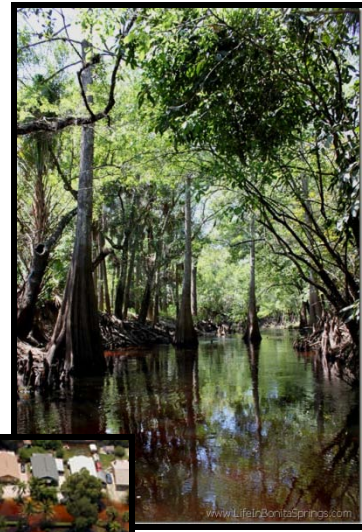
Prepared by:  
Barraco & Associates, Inc.



About 400 people packed Bonita Springs City Hall on Nov. 6.

# CITIZEN WATER TASK FORCE DIRECTED TO STUDY:

- Water quality and quantity issues
- Flowways and floodways
- Aquifers
- Stormwater management
- Watershed management and maintenance
- Wellfield protection
- Septic tanks
- Any other water issue related to DRGR and water management impacts to Bonita Springs



**Conservancy served as member of the  
Task Force**

## **SAMPLE OF REPORTS REVIEWED BY TASK FORCE:**

- **DHI MIKE SHE Report 2009**
- **Bonita Stormwater Master Plan Update Phases I & II**
- **So. Lee Co. Watershed Mgt. Plan Update 2009**
- **BMAP Progress Report 2013**
- **TMDL Report for DO in Imperial**
- **Rawl Report**
- **Estero Bay Watershed Assessment Vol D Mgt Options**
- **SWFL Watershed Plan**
- **Jefferson Flowway Report**

## **SAMPLE OF PRESENTATIONS TO TASK FORCE:**

- **SFWMD**
- **BSU**
- **Public Works**
- **Roger Copp (So. Lee Co. Watershed Plan Update)**
- **Eric Livingston (stormwater mgt.)**
- **FDEP**
- **Greg Rawl (hydrology)**
- **Bonita Aggregate Properties**
- **CREW**
- **FGCU**
- **Jim Beever**



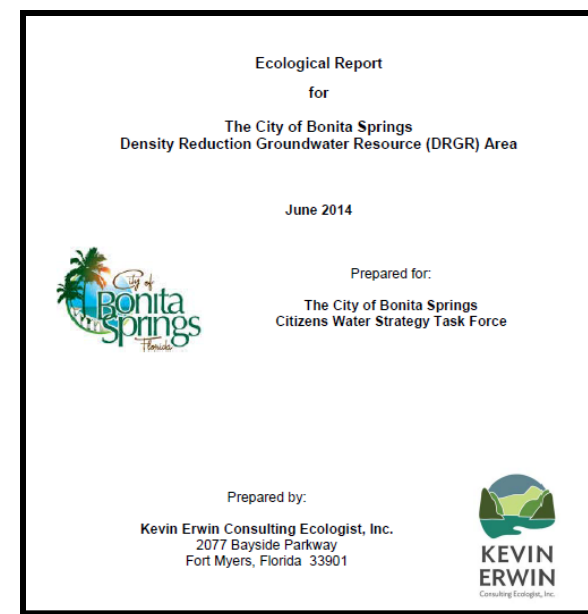
# KEVIN ERWIN ECOLOGICAL MEMO

**In addition, Council approved Task Force's recommendation to hire Erwin to conduct an ecological assessment of the Bonita DRGR**

- **Ecological mapping**
- **Summary of existing and historical conditions**
- **Recommendations**

***Erwin recommended Ecological Report as first step, to be followed by additional surface and subsurface water monitoring***

***This information could then be included in a model to be used as a decision making tool to understand how changes on the surface landscape will impact both surface and subsurface water resources***

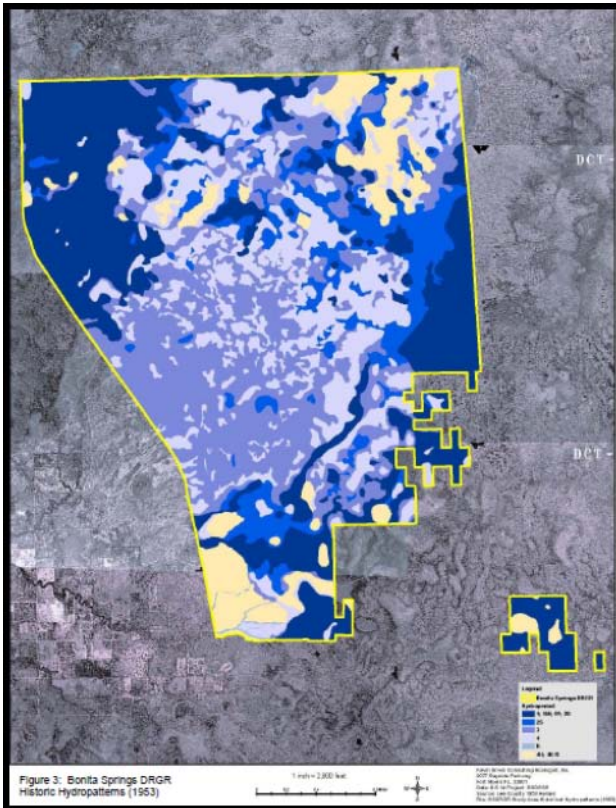




**Then:**

**Wetlands – 4,874ac or 91%**

**Uplands – less than 500ac**



Source: KLECE Bonita DRGR Report

**Now:**

**Dev't – 1,617ac or 30%**

**Ag – 1,289ac or 24%**

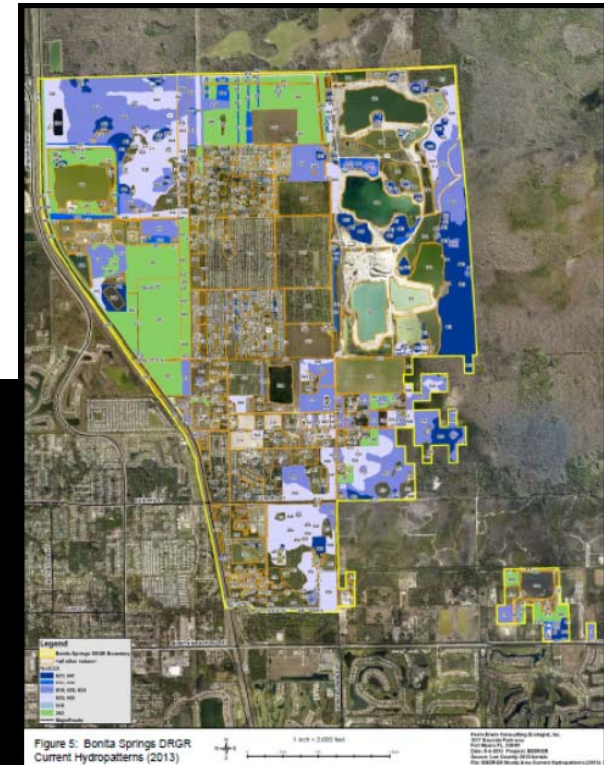
**Upland forest – 287ac or 5%**

**Water – 203ac or 4%**

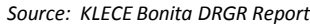
**Wetlands – 1,534ac or 29%**

**Barren land – 186ac or 3%**

**Infrastructure – 237ac or 4%**



- **Hydrologic conditions drier**
- **Water table significantly lower**
- **Surface water flow redirected from historical pathways**
- **Hydroperiods likely shorter**

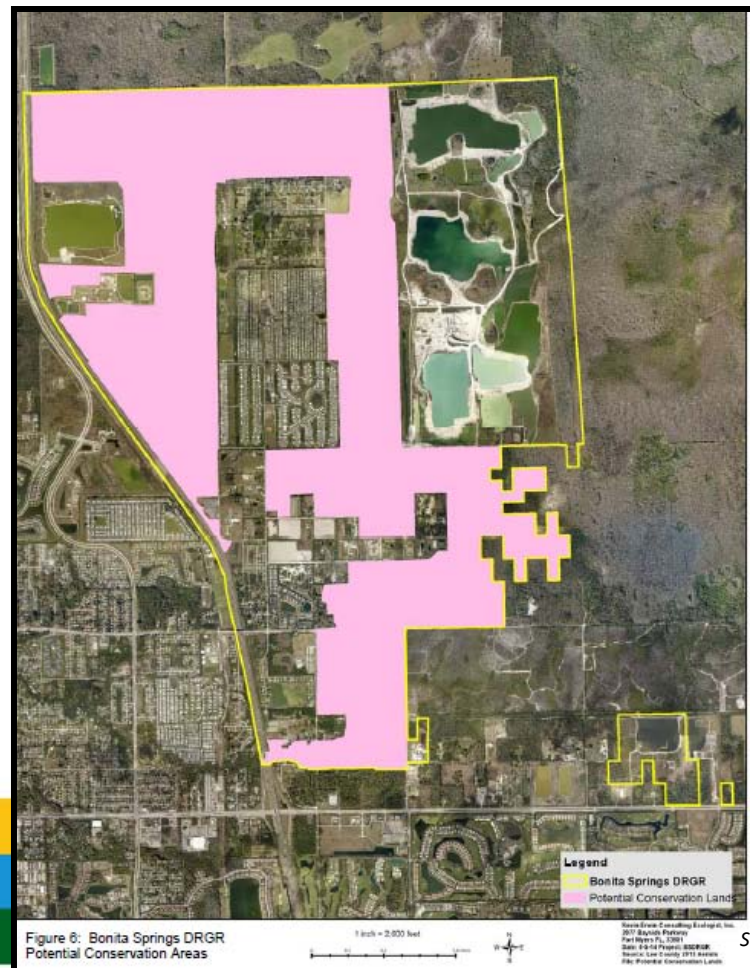




**Erwin Ecological Memo identified, “*significant potential water storage capacity that exists within the DRGR if appropriate management and restoration techniques are implemented.*”**

**This also benefits water quality**

## Potential Conservation Areas



## Potential Restoration Areas





# **34 TASK FORCE RECOMMENDATIONS FOCUSED ON:**

- **Slowing the water down**
- **Redistributing flow more evenly and in a more natural pattern**
- **Additional water treatment**
- **Additional water storage**
- **Restoring hydroperiod**
- **Raising water table**
- **Collaborating with partners**
- **Additional land acquisition**
- **More restrictive LDC requirements**
- **Additional subsurface water level monitoring**
- **Modeling**

**Water Quality**

**Water Quantity**

**Water  
Supply/Drinking  
Water**

**Misc.**



# March 18<sup>th</sup> Council Voted to Move Forward with 29 Task Force Recommendations in a Phased Approach

Immediate (3-6mo.)	Short-Term (within 1 year)	Long-Term (over 1 year and/or ongoing)
Simple changes to LDC, such as additional stormwater treatment standards and encouraging agencies to purchase remaining CREW outparcels	Conduct additional subsurface water level monitoring and creating a model capable of running scenarios to better understand how certain activities could impact the DRGR	Multi-Year, Multi-Jurisdictional projects, such as rehydration of Pine Lake Preserve and creation of a multi-agency working group

**The majority of the 29 Recommendations were supported unanimously by Council**



**April 15<sup>th</sup> City Staff brought the first of the Short-Term (3-6 months) recommendations forward requesting to advertise an Ordinance implementing Water Quantity Recommendation #1:**

***Implement and codify the improvement of the water retention/detention requirements in the DRGR by at least 10% over the current requirement of 1.5 inches***

**Council votes not to move Ordinance forward to first reading, in a 4-3 vote, citing concerns regarding this policy potentially facilitating additional density in the DRGR and questions of whether an additional 10% retention/detention was sufficient**

- **What does this mean for other Task Force Recommendations?**
- **How best to move forward?**
- **What is the best way for the ABM to participate?**





# **SUPPORT CITY MOVING FORWARD WITH IMPLEMENTING UNANIMOUSLY APPROVED RECOMMENDATIONS**

- **Maintaining momentum is critical!**

**June 17<sup>th</sup> Bonita City Council meeting**

- **Staff to bring forward Resolution in support of several short-term Recommendations previously supported by Council unanimously**
- **A Resolution of support will assist staff in initiating more detailed coordination with other agencies on these issues, along with providing direction to continue working on the initiatives identified in the Resolution**



**Bonita City Council**

**June 17<sup>th</sup>  
9:00am**

**Council Chambers  
9101 Bonita Beach Rd.**



# ADVOCATE FOR BUDGETARY FUNDING

Several Recommendations will require funding to move forward:

- Additional monitoring
  - Fill in data gaps in subsurface water levels
- Modeling
  - Create a decision-making tool to better understand how different activities impact water resources
- Land acquisition

**2015-16 Budget is adopted in September, but almost all of the budgetary issues are resolved at the time of the July 23<sup>rd</sup> workshop**

**Letters of support for funding these items should be sent to staff and Council late June or early July**

**If these items are not funded in the budget, it will be unlikely that they will be implemented within the next fiscal year**



# CONSIDER RPC/ABM ASSUMING THE ROLE OF COORDINATING ENTITY FOR WORKING GROUP

**Misc. #3 – Implementation of a collaborative Regional Watershed Management Group which should include all interested stakeholders, but at a minimum should include City, SFWMD, FDEP, FDOT, Lee County and BSU. The purpose of this group should be to facilitate water projects in and around the DRGR from concept to implementation**

- This working group will be instrumental in ensuring important water projects in and around the DRGR are completed in a timely and ecologically-appropriate manner
- After hosting the first few meetings, the City would like for another entity to lead this effort





# FOR ABM CONSIDERATION:

1. Send letter of support from ABM to the City for moving forward with implementing unanimously approved recommendations and for budgetary funding
2. Consider requesting RPC discuss with City the possibility of assuming the role of coordinating entity for the proposed working group

