DANCING WITH IRMA

THIS IS NOT LIKE YOUR SENIOR PROM

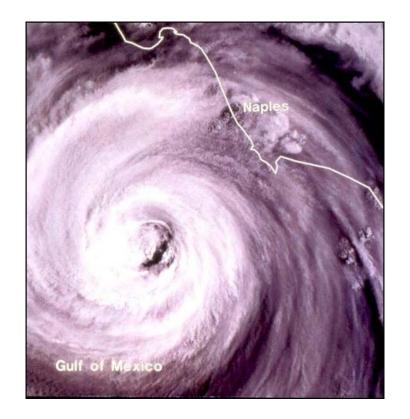
TIM HIERS, CGCS

□ PRE HURRICANE PREP

□ RIDING OUT THE STORM

□ POST HURRICANE OPERATIONS







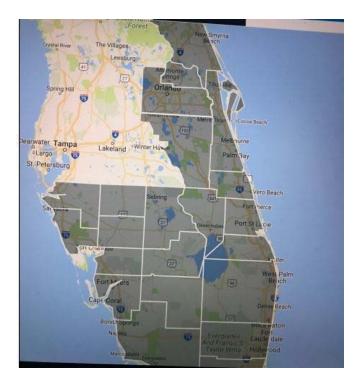
Hurricane Comparison in Naples

Hurricane Wilma Oct. 23, 2005 125 MPH winds Fast moving (13 MPH?) Less rain (5" ?) Hurricane Irma Sept. 10, 2017 141 MPH winds+ Slower moving (9 MPH?) More rain (10")+ Very wet rainy season

1.2 million cubic yards - 4.2 million cubic yards



MAP OF POWER OUTAGES THAT RANGE FROM 1 TO 6 WEEKS





CONSIDER PORTABE IRRIGATION PUMP INSTEAD OF EXPENSIVE GENERATOR





A SMALL PORTABLE GENERATOR WITH AIR COMPRESSOR CAN BE VALUABLE EVEN OUT OF STORM SEASON













HAVE SUFFICENT AMOUNT OF SAND BAGS ON HAND PRIOR TO STORM SEASON





CLEAN WATER IS VALUABLE AFTER A STORM





BUY ENOUGH TO SUPPLY YOUR STAFF FOR AT LEAST TWO WEEKS





- STORE RESERVE FUEL IN 250-300 TANK ON SITE
- FILL TANK EVERY JULY AND USE BY THE END OF HURRICANE SEASON
- □ MAY HAVE TO ADD FUEL PRESERVATIVE
- □ FILL ALL EQUIPMENT AND FUEL CONTAINERS PRIOR TO STORM AND JUST BEFORE FILLING MAIN FUEL SUPPLY IF POSSIBLE
- FILL REGULAR FUEL TANKS ONE WEEK PRIOR TO POTENTIAL STORM
- AS STORM APPROACHES AND AFTER STORM ALL EMERGENCY SERVICES WILL TAKE PRIORITY
- BUY EXTRA FUEL CONTAINERS PRIOR TO HURRICANE SEASON
- TEST RUN ALL GENERATORS AND CHAIN SAWS, ETC. PRIOR TO HURRICANE SEASON AND A FEW DAYS FROM POSSIBLE STORM ACTION

- SHUTDOWN IRRIGATION PUMP STATIONS, SATELLITE CONTROLLERS, AND NON CRITICAL INFRASTRUCTURE POWER
- BACKUP IRRIGATION CENTRAL COMPUTER TO A FLASH DRIVE AND TAKE OFF SITE
- REMOVE ANY COMPUTERS THAT MAY BE ON THE FLOOR AND PUT ON TOP OF DESKS IN CASE OF FLOODING

- STORE BOTTLED WATER BY THE PALLET OR PALLETS IN THE PROPER PLACE
- STORE NON PERISHABLE SNACKS LIKE PACKAGED CRACKERS, NUTS, AND CANNED FRUIT
- IF POSSIBLE STORED ICE IN PROPER CONTAINERS PRIOR TO STORM IN CONDITIONED SPACE
- ICE PRODUCED FROM YOUR MACHINES MAY NOT BE SAFE IF WATER LINES ARE BROKEN OR CONTAMINATED AFTER THE STORM
- HAVE PLENTY OF HAND TOOLS LIKE SHOVELS, RAKES, PLASTIC TRASH CANS, AXES ETC. ON HAND
- STORED PREPACKED SAND BAGS OUT OF SUNLIGHT AND IN DRY AREA
- □ HAVE EXTRA BAGS OF SAND ON HAND AND SAND

PREPARING EMPLOYEES FOR STORM AT THEIR HOMES IS IMPORTANT

- □ HAND OUT PERTINENT INFORMATION TO HELP THEM PREPARE
- □ SHOW CONCERN FOR THEM AND THEIR FAMILIES
- CONSIDER OBTAINING PASSES FOR EMPLOYEES TO GET BACK TO PROPERTY AFTER THE STORM
- DEVELOP A MEANS TO COMMUNICATE WITH EMPLOYEES IN THE EVENT CELL COVERAGE IS DISRUPTED

- PROCURE AGREEMENTS WITH CONTRACTORS PRIOR TO HURRICANE SEASON OR YOU MAY NOT GET TIMELY ASSISTANCE
- □ HAVE CONTRACTORS STAGE EQUIPMENT ON SITE BEOFRE STORM
- □ WHERE WILL YOU STOCKPILE STORM DEBRIS
- CONSIDER SPRAYING PGR AT HIGHER RATES IN THE EVENT YOU ARE NOT ABLE TO MOW FOR ONE OR MORE WEEKS
- □ SPRAY A PREVENTATIVE FUNGICIDE ON GREENS
- CONSIDER WETTING BUNKERS PRIOR TO STORM TO REDUCE SAND BLOWN OUT
- A WHOLE SYSTEM GENERATOR FOR YOUR MAINTENANCE FACILITY COULD PAY BIG DIVIDENDS
- YOU CAN RUN YOUR OPERATIONS WITH POWER AND AIR BUT ALSO MAY PROVIDE TEMPORARY HOUSING FOR SOME EMPLOYEES WHO HAVE SEVERELY DAMAGED HOMES
- OBTAIN COTS TO SLEEP ON

TAKE MEASURES TO REDUCE TURF DAMAGE WHEN REMOVING STORM DEBRIS





HAVE SUFFICIENT AMOUNT OF TRAFFIC CONES IN STORAGE





IN SOME CASES IN MAY BE SEVERAL DAYS IN CERTAIN AREAS BEFORE YOU CAN BEGIN CLEANUP





PROLONGED SUBMERGED WATER CAN CREATE LONG TERM DAMAGE





YOU MAY HAVE STAGES OF CLEAN UP AS THE FLOOD WATERS RECEDE





DO NOT ALLOW MEMBERS OR OTHERS ON COURSE UNTIL IT IS SAFE





THE SOIL MAY BE TOO WET FOR SWEEPERS SO SOME CLEANUP WILL NEED TO BE DONE BY HAND RAKING





COLLECT AND STORE ITEMS PRIOR TO STORM SEASON









CONTRACTORS MUST BE EXPERIENCED IN AVOIDING UNNECESSARY DAMAGE TO COURSE





APPROVED CONTRACTORS SHOULD BE RETAINED PRIOR TO STORM SEASON AND MOBILIZE TO SITE BEFORE STORM





CONTRACTORS MUST BE EXPERIENCED IN DEBRIS REMOVAL AND DISPOSAL





STORE FUEL IN RESERVE PRIOR TO STORM





MOBILE CONTAINERS CAN BE BENEFICIAL





OBTAIN SEVERAL SMALL SAFETY APPROVED FUEL CONTAINERS







DEBRIS CLEAN UP CAN BE COMPLICATED





DURING THE HURRICANE

IF THE STORM IS STRONG ENOUGH CONSIDER LEAVING TOWN IF YOU HAVE A PLACE TO GO

BRING APPORVED FUEL CAN IN YOUR VEHICLE AND WATER

DON'T VENTURE OUT INTO STORM UNTIL IT HAS PASSED

POST HURRICANE

- □ BE ALERT FOR FALLEN POWERLINES, HANGING LIMBS, ETC.
- IF THERE IS SIGNIFICANT FLOODING SNAKES COULD BE VERY DANGEROUS
- □ ASSESS THE STORM DAMAGE AND SET PRIORITIES
- TAKE PICTURES AND DRONE FOOTAGE FROM ABOUT 10-15 FEET OFF THE GROUND
- IF YOU SHOOT TO HIGH IN THE AIR IT MAY NOT CAPTURE THE REAL SCOPE OF DAMAGE
- THESE PICTURES COULD BE IMPORTANT FOR INSURANCE DOCUMENTING AND COMMUNICATIONS WITH CLUB

BE SENSITIVE AND AWARE OF EMPLOYEE NEEDS





STUDY WAYS TO HARDEN YOUR COURSE OFF FOR THE NEXT HURRICANE OR STORM EVENT

LOOK FOR OPPORTUNITIES TO EXPEDITE PROJECTS LIKE CART PATH RESURFACING, DRAINAGE INSTALLATION OR BUNKER SAND REPLACEMENT BECAUSE OF STORM DAMAGE

IF EMPLOYEES SUFFER DAMAGE AT HOME CONSIDER ASKING THE MEMBERSHIP TO AID IN THEIR RECOVERY BY RAISING FUNDS THROUGH DONATIONS EVEN IF YOU HAVE NEVER EXPERIENCED A HURRICANE, GOING THROUGH PRACTICE DRILLS CAN BE VERY BENEFICIAL

CONSIDER INVITING SOME GOLF COURSE SUPERINTENDENTS WHO HAVE EXPERIENCED A STRONG STORM OR HURRICANE ASK THEM WHAT THEY LEARNED AND WHAT THEY WOULD DO DIFFERENTLY

□ THEY DON'T NECESSARILY HAVE TO VISIT YOUR SITE. JUST ASK THEM TO SHARE THEIR LEARNING CURVE WITH YOU VIA EMAIL

BENEFITS OF A HURRICANE

- TREE THINNING CAN CREATE MORE SUNLIGHT AND AIR MOVEMENT FOR A HEALTHIER TURF
- □ IT COULD ALSO REDUCE TREE ROOT INTRUSION INTO TURF
- YOU COULD PLANT TREES AND VEGETATION MORE SUITABLE TO EACH PARTICULAR MICRO ENVIRONMENT AND SELECT PLANTS THAT USE LESS RESOURCES AND MAINTENANCE WHILE PROVIDING MAXIMUM BENEFITS TO INSECTS AND WILDLIFE
- A STORM MAINTENANCE PROGRAM COULD MAKE YOUR TREES LESS SUSCEPTIBLE TO HIGH WINDS IN THE FUTURE IF THERE IS A DISCIPLINED PROGRAM OF SELECTIVE REMOVAL OR TRIMMING
- IT MAY PROVIDE AN OPPORTUNITY TO MAKE INFRASTRUCTURE IMPROVEMENTS LIKE NEW OR RESURFACED CART PATHS, DRAINS, ETC.