**Percent Cover**

For both sheets in these files percent cover values are given. These values are given as raw proportions – that is they are not multiplied by 100 to give an actual percent. All the values in the Grp sheet should sum up to 1 for each station/record. All the values in the Spp sheet should sum up to the value for ‘Stony Coral’ in the Grps sheet for each station/record.

For both Station Grps and Station Spp

Year – sample year – CREMP is an annual monitoring project. Each site is generally visited between May and August with occasional site visits in September through December depending on weather and sea conditions.

SubregionId – CREMP monitoring is separated into three project regions with different funding sources. Each project region has designated subregions; DT = Dry Tortugas, LK = Lower Florida Keys, MK = Middle Florida Keys, UK = Upper Florida Keys, DC = Dade County, BC = Broward County, PB = Palm Beach County, and MC = Martin County.

Habitatid – CREMP monitoring is separated in several habitat areas. These are different depending on the project region. FKNMS - HB = Hard-bottom, BCP = Back Country Patch Reef, P = Patch Reef, OS = Offshore Shallow, and OD = Offshore Deep. Dry Tortugas – P = Patch or Pinnacle, OD = Offshore Deep. Southeast Florida – 1R = 1st ledge/reef, 2R = 2nd ledge/reef, 3R = 3rd ledge/reef, NS = Nearshore.

Site Code – A separate 3 letter code for each site which reflects the water quality segment for the water quality monitoring program set up as part of the South Florida Water Quality protection Program (WQPP).

Siteid – A unique site identifier for all CREMP sites. These values do not overlap between project regions.

Sitename – A site name. Some of these are made up and given by our program whereas others particularly in the Florida Keys and Dry Tortugas are official site names found on charts.

StationID – A unique identifier for all CREMP stations. CREMP follows a nested design where each site has 2-4 survey stations. This value is the Siteid plus the station number for that site.

Surveyed\_all\_years? – this column indicates whether a particular station was surveyed during all years of monitoring once the station was installed and monitored for the first time. This column only applies to CREMP in the Florida Keys (From about 2001 to 2010 a number of stations were dropped from the survey). A ‘Y’ indicates that a station was surveyed in every year during this time and an ‘N’ indicates that it was not.

Points – This column indicates how many random points were counted to determine the percent cover values for a given station.

For Station Grps the remaining columns are the major substrate groups that are counted in our point count analysis. For Station Spp the remaining columns are the stony coral species that are counted in our point count analysis. ‘Scleractinia’ indicates that a colony was identified as a stony coral but the species could not be determined.

**SCOR\_Population**

Raw Data

The first 6 columns have the same description as the first 6 columns in the Percent\_Cover file.

SPP\_code – A four letter abbreviation for each stony coral species.

SciName – the Latin/scientific name for each stony coral species.

Diameter – the maximum diameter in centimeters of a measured stony coral colony

Height – the maximum height in centimeters measured perpendicular to the plane of growth for a measured stony coral species.

%old – the percent of each measured colony determined as old mortality (having died more than 2-3 weeks ago). This value is estimated visually by the observer conducting the survey.

%recent – the percent of each measured colony determined as recent mortality (having died less than 2-3 weeks ago). This value is estimated visually by the observer conducting the survey.

Tissue\_isolates – the number of separate contiguous areas of living tissue observed on a measured coral colony

Conditions – a three letter code indicating a stony coral disease or other condition; BLH – bleaching, PBL – partial bleaching, PAL – paling, DSD – Dark Spot Disease, WPL – White Plague Disease, WPX – White Pox Disease, WBD – White Band Disease, RTL – Rapid tissue Loss, DOB – Stony Coral Tissue Loss Disease, BBD – Black Band Disease, RBD – Red Band Disease, YBD – Yellow Band Disease, CIL – Ciliate Infection, PRD – Predation, DAM – Damselfish, SED – Sedimentation, CDL – Cliona delitrix Infection, CLN – Cliona spp. Infection, OGI – Overgrowth or Other Interaction, SKA – Skeletal Anomaly, ABR – Physical Abrasion, DMG – Physical Damage, UNK – Unknown Condition

LTA – Live Tissue Area in cm2, this value is calculated from the diameter and height measurements using the equation for the surface area of an ellipsoid.

Counts

This summary sheet is a cross-tabulation of the raw data. It is the count or number of each coral species found in each survey station. The first 6 columns are described above. The remaining columns up to ‘total’ are each of the coral species. The total column is for all species combined or summed for each station.

Density

This summary sheet is a cross-tabulation of the raw data. It is the density or number of each coral species per meter found in each survey station (the counts divided by 10 which is the total area surveyed in meters for each station). The first 6 columns are described above. The remaining columns up to ‘total’ are each of the coral species. The total column is for all species combined or summed for each station.

LTA

This summary sheet is a cross-tabulation of the raw data. It is the total living tissue area for each coral species found in each survey station. The first 6 columns are described above. The remaining columns up to ‘total’ are each of the coral species. The total column is for all species combined or summed for each station.

**OCTO\_Population**

This survey takes place at a subset of sites.

Raw Data

The first 6 columns have the same description as the first 6 columns in the Percent\_Cover file.

SPP\_code – A four letter abbreviation for each octocoral species. \*This survey targets 6 octocoral species and counts all octocoral colonies present in a station. The 6 target species are included in the count. The count is listed with the data for each individual species despite it being a different kind of measurement (see below).

SciName – the Latin/scientific name for each octocoral species.

Colony height (CM) – The height measured in cm from the base of the octocoral colony to the tip of the tallest branch. For ‘All Species Count’ this value is the number of octocorals counted in each station. ‘All Species Count’ should have 1 record for each survey station in the raw data sheet.

Density

This summary sheet is a cross-tabulation of the raw data. It is the density or number of each octocoral species per meter found in each survey station (the total count of each species divided by 10 which is the total area surveyed in meters for each station). The first 6 columns are described above. The remaining columns up to ‘Octocoral Tally’ are each of the coral species. The ‘Octocoral Tally’ is the total count of all octocorals from each station and should match the single record ‘All Species Count’ for each station in the raw data sheet. Blank cells indicate no data – all species listed were not surveyed in every year.

Mean Height

This summary sheet is a cross-tabulation of the raw data. It is the mean height for each octocoral species targeted in the survey. The first 6 columns are described above. The remaining columns are each of the octocoral species. Blank cells indicate no data – all species listed were not surveyed in every year and where a species was not found in a station (a zero in the density sheet) no mean height is possible.

**Temperature**

The temperature files for each part of CREMP are all csvs. The columns are fairly self-explanatory. For Florida Keys and Dry Tortugas one temperature logger is deployed at a subset of sites with the number of sites increasing through the years. All loggers are attached to the survey marker stakes affixed to the reef substrate and are recording bottom water temperatures. For Southeast Florida 2 loggers are deployed at every site surveyed. The SiteID and the stationID are described above. The date and time of day are given and broken down into separate columns. The temperature value for each hour recorded is given in Fahrenheit and Celcius.