



Building a Project Baseline Area

How to create a Project Baseline Google Earth layer
using Google's **Spreadsheet Mapper**, **Picasa**, **YouTube**, and **Blogger**



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Reintroduction to Project Baseline

Thank you for your interest in building a Project Baseline Google Earth layer! Project Baseline is possible only through the ongoing commitment of driven volunteers around the world. You are embarking on an adventure of real-world importance—through your work, the plight of your Project Baseline Area will gain visibility and, it is our hope, create traction and generate momentum for scientifically sound decision-making at the local, regional, national, and international level. Congratulations on your decision to take this important first step.

Project Baseline is designed to capitalize on data types likely to already be collected by the typical GUE-trained diver. By “data” we mean photos, videos, and narrative logs. Additionally, some GUE affiliates are already collecting, or have plans to collect, other types of data, including fish counts, salinity, turbidity, temperature, biological surveys, and more. As you grow your mastery of the process for building and maintaining your Project Baseline Google Earth Area layer, you may wish to incorporate some of these additional data streams into the story you tell about your Area; however, as you are getting your feet wet, so to speak, keep your focus on developing your database of relevant photos, videos, and narrative logs.

We have chosen Google Earth as our means to communicate with the public about the continued decline of marine environments around the world. Google Earth is free, familiar, powerful, scalable, widely used, and highly visual—in short, it provides an excellent framework through which to tell the story of your Area. The GUE Project Baseline team has developed a series of templates designed to accommodate the data you have collected and will collect in support of Project Baseline.

At its core, Project Baseline is about communication. In order for this communication to be well received by other divers, the public, the scientific community, and decision makers at all levels (quite the diverse audience!), it must be accurate, relevant, and succinct. Later in this guide we will provide guidance on the specific format required for each of the different main data types.

Finally, it is important to remember that you are enlisting as a “citizen scientist”—your mission is to document the conditions at your Area in a way that is meaningful and consistent. Through this training guide, you will learn the skills you need to succeed at this timely and important mission.

Glossary

Area – in Project Baseline, the region encompassing all of the Placemarks

Balloon – the window that appears in the Google Earth viewer when a Placemark icon is clicked; can be formatted to contain text, images, video, web links, etc.

Blogger – a free Google product for creating and managing blogs; in Project Baseline, the preferred online repository for Observation Logs

Geo-referenced – a data point specific to a particular place on the Earth's surface, identified using latitude and longitude

KML – a file extension like .doc or .exe, this is the programming language understood by Google Earth; a variation of the .kml extension is .kmz, which packages together multiple .kml files and compresses them into a smaller file

Layer – in Google Earth, a series of geo-referenced Placemarks, Overlays, and Balloons that are packaged together into a KML file

Network Link – A network link instructs Google Earth to retrieve a KML stored remotely on the web so that every time a user opens his or her Google Earth program, the network link retrieves the latest version of the KML file from the web and keeps the user's view up-to-date.

Overlay – in Google Earth, an image that is displayed over the Earth's surface

Picasa – a free Google product for uploading, storing, and sharing photos

Placemark – In Project Baseline, a monitoring location or a location that is crucial to the telling of the story of your Area; every Placemark has a latitude and longitude and an associated Balloon that appears when a user clicks on it.

Spreadsheet Mapper – a free Google product resembling Microsoft Excel through which a Project Baseline Area Lead can enter information about each of the Placemarks in the Area, which then generates automatically a network-linked KML file using formulas that are embedded in the Spreadsheet Mapper

Template – in Spreadsheet Mapper, the HTML code that determines how a Balloon will be displayed within Google Earth; each Placemark must have a template defined in Spreadsheet Mapper.

YouTube – a free Google product for uploading, storing, and sharing videos

Before You Begin: Defining Your Vision and Your Organization

1. First, think about your proposed Project Baseline Area and how you can best share it with the world. For ideas, download the KML file for “Project Baseline: Wakulla Spring” from the Project Baseline website (www.projectbaseline.org/projects.html).
2. For your proposed Area, you will need the following.
 - a. NAME. You will need to come up with a name for your proposed Project Baseline Area and each monitoring site within it. This is harder than it sounds. The Area name should be broad enough to tie together the individual monitoring sites, specific enough to be unique among other Project Baseline initiatives, and recognizable enough for it to resonate with someone who might not be very familiar with your particular Area. For example, the “Wakulla Springshed” Project Baseline Area addresses the Woodville Karst Plain in northwestern Florida. However, most people don’t know what a karst is, where Woodville is, or what a plain has to do with water quality. It’s just not “catchy,” memorable, or meaningful. On the other hand, most Floridians and many other people HAVE heard of Wakulla Spring—it’s the biggest spring in the state, it’s a state park, it’s played host to several Hollywood productions, and it’s really pretty. It’s the poster child, so to speak, of the Woodville Karst Plain, but it is representative of declining conditions throughout the Area.
 - i. Once you settle on a name for your proposed Project Baseline Area, email the Project Baseline Coordinator and identify the following information.
 1. Your name
 2. The name of your proposed Project Baseline Area
 3. Your Google Account name
 4. Whether or not you have already developed any online-hosted content for your Area, and if so, what types
 - ii. Using this information, the Project Baseline Coordinator will create a Google Spreadsheet Mapper (more on this soon) for your Area and email the link to you; this is how you will build your Google Earth layer for your Area.
 - b. LOCATIONS. Think about your Project Baseline Area and identify a list of at least five locations that you have visited and will continue to monitor; these locations are called **Placemarks** in Google Earth, so that is how we will refer to them in this training guide. These Placemarks should all be related in a meaningful way. For example: the Placemarks for the “Wakulla Springshed” Project Baseline Area are primarily springs and sinkholes connected to Wakulla Spring via a network of underwater caves.

For each Placemark, you will need to provide a short description, identify why that Placemark is important (relevance), and talk about what is being done to protect or conserve it (actions).

c. DATA. What types of data?

- i. Photographic data for each Placemark within your Area over time. You will need the date, time of day, point of view (for example, “from Monitor Site 6 looking up,” or “from tunnel entrance looking in,” etc.), and photographer. In order for photos to document sufficiently the conditions at the Placemark, they should ideally be taken from a consistent location, at a consistent time of day, and at regular intervals (monthly, weekly, yearly, etc.). You should also be sure to document any variables impacting the site on the day the photo was taken—for example, maybe there was a recent rain event that is clouding the water.
- ii. Videographic data are also useful data for telling the story of your Area, as videos give the viewer an idea of what it feels like to interact with a Placemark. You will also need to include the date, time of day, point of view, and videographer.
- iii. Narrative data would include dive logs, interviews, historical accounts, etc. We have developed an observation log template for recording scientifically relevant conditions each time you visit a Placemark. Consider this: maybe when you started diving at your location twenty years ago, typical visibilities were one hundred feet; now they’re fifty. But Old Jim, he used to snorkel there in the ‘50s and he remembers being able to see the 200-foot deep wreck—from the surface. Though memories aren’t quite as reliable as historical photographs, they help to paint a picture of what conditions used to be like at your site.
- iv. Hydrologic data, if available, is quite valuable for establishing baseline conditions at each Placemark. These might include chemical analyses, flow rates and directions, etc. Check with research institutions in your area to see if there are hydrologic data you could incorporate into your Project Baseline Area.
- v. Biological data, which includes fish counts, coral surveys, algal surveys, etc.

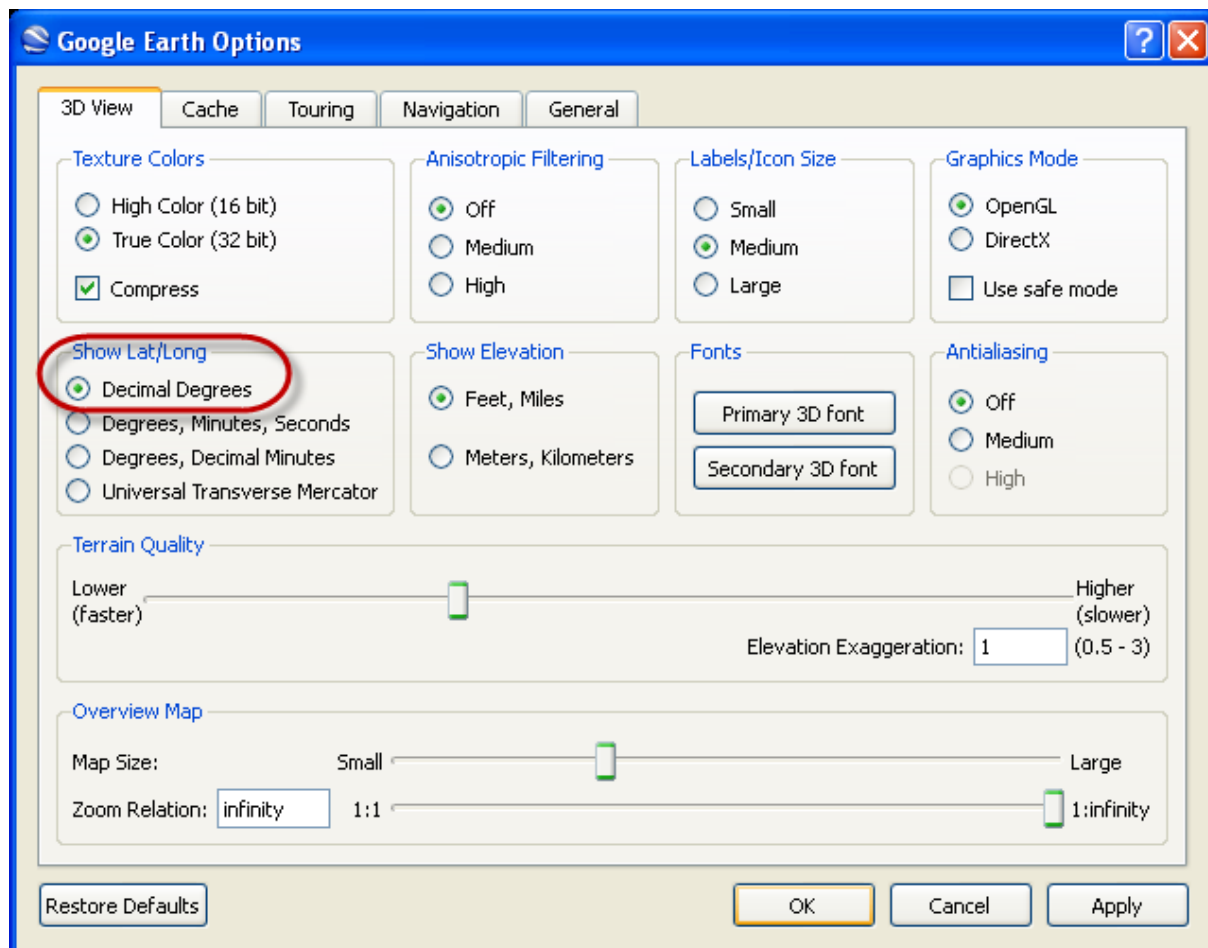
- d. GOOGLE ACCOUNT. If you don’t have one already, you will need to create a Google account. This will give you the power to develop and store documents, photos, and videos online, all for free. Your Google account will also grant you access to Picasa, an online photo storage/sharing website, and YouTube, the web’s most popular video hosting site. Since both Picasa and YouTube are Google applications, they integrate very well with the Project Baseline Google Earth layer. Alternatively, you could use another web-based photo storage site, but

you may not get the functionality available through Picasa, such as slideshows (a great way to show multiple photos of a single Placemark), and you would be venturing into untested territory.

- e. LOGO. The templates we have designed for Google Earth have a dedicated space on each Balloon for the participating dive group's logo. The logo should be simple, and it should look good even when it's shrunk down to a maximum of 112 x 112 pixels, which is how big it will be in the Google Earth Placemark Balloon. If you do not have a logo, we have a "Project Baseline Partner" logo we will provide for your use.

Before You Begin: Prep Your Workstation

1. Download Google Earth. It's free. Open the program and change how your latitude/longitude coordinates are displayed by clicking "Tools" from the top menu, then selecting "Options..." from the drop-down menu. The following dialog box displays.

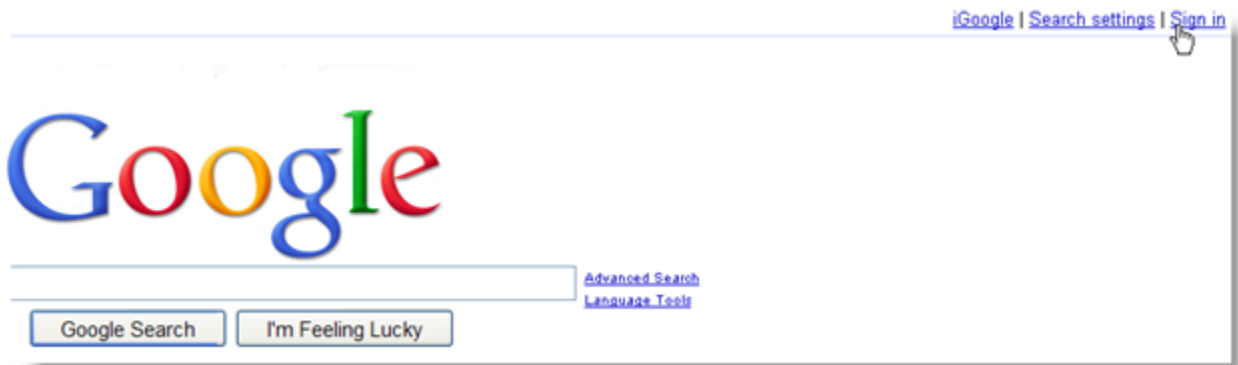


2. Make sure "Decimal Degrees" is selected; this is the Latitude/Longitude format that Spreadsheet Mapper uses for all Placemarks.
3. Watch both of Google's brief "How To Use Spreadsheet Mapper" movies, located here: http://earth.google.com/outreach/tutorial_spreadsheet.html.

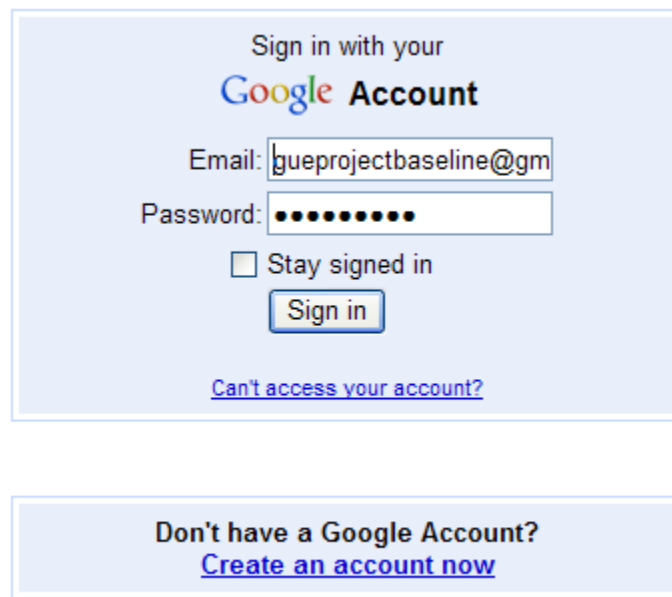
Now you are ready to start building a Google Earth layer for your proposed Project Baseline Area.

Getting Started: Logging into Your Google Account and Google Docs

1. Open your internet browser** and navigate to www.google.com.
 - a. **NOTE: Internet Explorer, Mozilla Firefox, and Google Chrome are known compatible browsers. Other browser compatibility may vary.



2. Located in the upper right-hand corner of your browser window, click the “Sign in” link.



3. Enter your Google account email and password. Your login name will now appear at the top right corner of the Google homepage.
4. Next, from the top of your browser window, click the hyperlink labeled “more ▼.” When the drop-down menu displays, select “Documents.” The **Google Docs** homepage

displays. If you have not used Google Docs previously, the only document available will be the Spreadsheet Mapper for your Area.



Google docs [Show search options](#) [Browse template gallery](#)

All items

- Owned by me
- Opened by me
- Shared with me
- Starred
- Hidden
- Trash
- Items by type ▾
- More searches ▾
- ▼ My folders
 - No folders.
- Folders shared with me

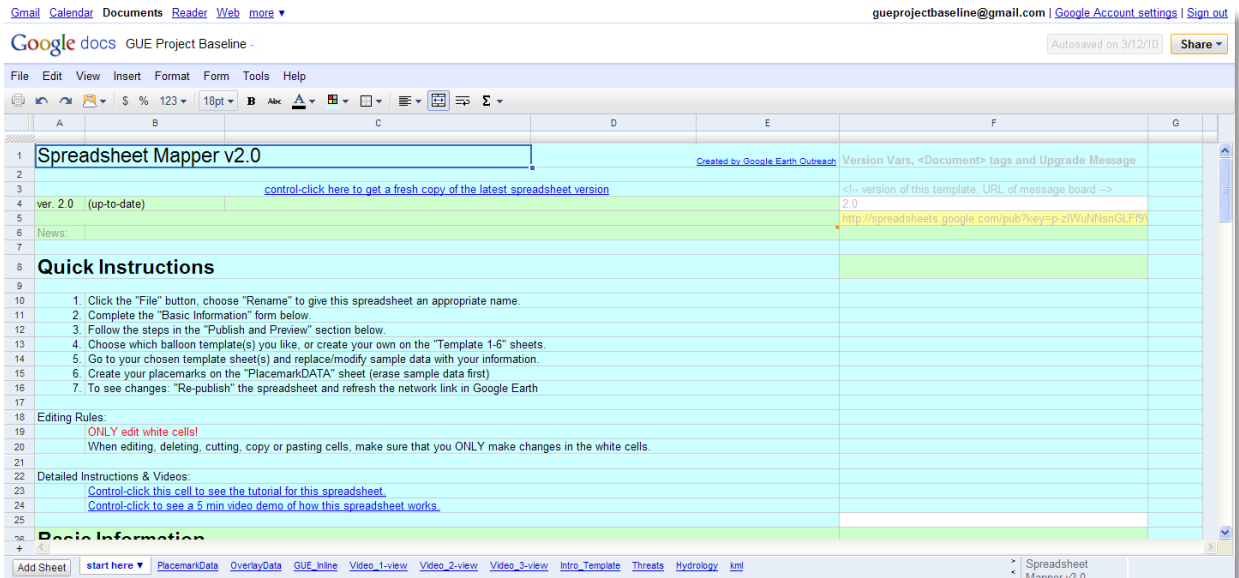
All items Refresh

☒
1-7 of 7

<input type="checkbox"/>	<input type="checkbox"/>	Name	Folders / Sharing	Date
TODAY				
<input type="checkbox"/>	<input type="checkbox"/>	GUE Project Baseline - Your Project Name Here	Not shared	12:08 pm me
EARLIER THIS MONTH				
<input type="checkbox"/>	<input type="checkbox"/>	High Springs Map-Plugin	Not shared	Sep 16 me
<input type="checkbox"/>	<input type="checkbox"/>	High Springs Map-GE	Not shared	Sep 16 me
<input type="checkbox"/>	<input type="checkbox"/>	Instructor Layer-Plugin	Not shared	Sep 14 me
<input type="checkbox"/>	<input type="checkbox"/>	GUE Map	Not shared	Sep 14 me
<input type="checkbox"/>	<input type="checkbox"/>	GUE Project Baseline - Wakulla Spring	Project Baseline to 3 collaborators	Sep 8 Project Baseline
EARLIER THIS YEAR				
<input type="checkbox"/>	<input type="checkbox"/>	GUE Project Baseline - High Springs	Project Baseline to 7 collaborators	Apr 29 me

Accessing Spreadsheet Mapper

1. Click on the text of the document called “GUE Project Baseline – [your area]”. The Spreadsheet Mapper opens.



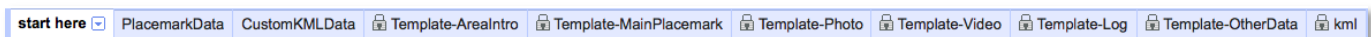
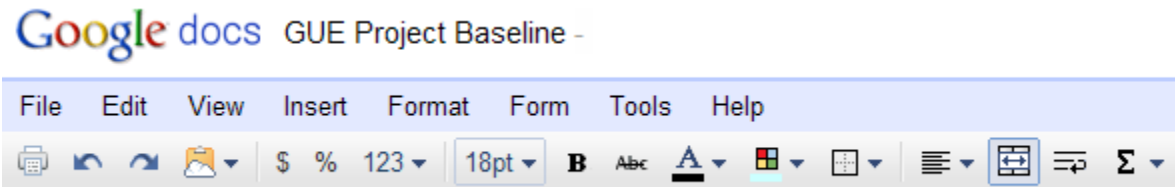
2. If you have not used Google Spreadsheets before, what you are seeing is basically a streamlined spreadsheet program, hosted entirely online. You get a familiar user interface with some of the key functionality of a typical spreadsheet application, including the ability to utilize formulas.
3. The Spreadsheet Mapper is Google’s creation. It allows you to create, update, and manage hundreds of Placemarks from a single worksheet. It does this by creating a network-linked KML file using a series of formulas stored within the cells of the Spreadsheet Mapper. A KML file is to Google Earth what a .doc file is to Word—it is the file type recognized by Google Earth, and it contains all the information needed to display Placemarks, Balloons, and map overlays in the application. A network-linked KML means the KML is hosted online instead of on your local computer. This means you can always keep the corresponding Google Earth layer up-to-date and relevant, since any time a user opens Google Earth on his or her personal computer, the network link to the specific Project Baseline Spreadsheet Mapper file will retrieve the web-hosted KML file from Google docs, along with any changes you have published since the last time the user viewed the layer. But, you know all this since you took the time to watch the Spreadsheet Mapper videos reference in the “Before You Begin” section of this manual. Right? If you haven’t watched it, Google does a great job of explaining this; take the five minutes to watch it now.

Orientation to Spreadsheet Mapper

First, a quick orientation to the Spreadsheet Mapper:

1. Only edit the white cells!

2. Along the top of the spreadsheet window, you will see familiar menu options similar to those you would find in Microsoft Excel.



3. Along the bottom of the spreadsheet, you will see ten different worksheets. Each is described below.
 - a. start here – This sheet contains the high-level information needed to publish your KML file, including name, folder display options, custom “LookAt” views of the layer in Google Earth, etc.
 - b. PlacemarkData – This sheet is where you will spend all of your time. It is where you enter lat/long coordinates, describe your Placemark, select which template to use for each Placemark, enter links to web-hosted photos and videos, create tours of your Area, etc.
 - c. CustomKMLdata – This sheet enables you to package additional web-hosted KML files along with your Placemarks. Examples would be a shapefile map of the Woodville Karst Plain cave system, or the results of dye tracing experiments, or a historical map shoreline overlay, or bathymetry data. This sheet probably will not be used by most partner organizations.

***[Worksheets d through i are templates that determine the layout of the Placemark Balloons in Google Earth; they are locked and cannot be edited.]*

- d. Template-AreaIntro – (Placemark icon: play button) Here is where the Project Baseline partner organization will tell the Google Earth user a high-level story about the Area, its plight, and what the organization is doing (and what the user can do) to catalog and protect it. Some quick notes about using the Intro Template are as follows.
 - i. The Partner Logo image should be 112 pixels wide.

- ii. The Data Type images should be 112 pixels wide.
- iii. The Intro Photo image should be at least 400 pixels wide.
- e. Template-MainPlacemark – (*Placemark icon: compass*) Use this template to introduce users to each of the Placemarks you have chosen to include in your Project Baseline Area.
- f. Template-Photo – (*Placemark icon: camera*) This template enables you to display web-hosted slideshows and images—for example, from Picasa.
- g. Template-Video – (*Placemark icon: video camera*) This template displays web-hosted video—for example, from YouTube.
- h. Template-Log – (*Placemark icon: book*) This template is the one you will use to display web-hosted observational data—for example, from Blogger.
- i. Template-OtherData – (*Placemark icon: water drop*) This template is used to display other data types besides image and log data; this might include links to fish counts, hydrologic data, chemistry, etc. It is set up to accommodate a single web-hosted photo.
- j. kml –*this sheet is locked and cannot be edited* –This sheet contains the formulas that take the data you enter elsewhere in the Spreadsheet Mapper and turn them into a KML file.

Please note: *if your organization has already invested significant resources in developing your own non-Google methods of hosting photos, videos, logs, etc., please let us know. We have developed Placemark templates to display your online content from within Google Earth and will work with you closely to accommodate your existing infrastructure.*

4. Click the “start here” sheet. Here you will notice that your Project Baseline Area name has been pre-populated for you under the “Basic Information” section. This is how your Area will be known around the world; if you need to change its name for some reason, you must contact the GUE Project Baseline Coordinator so that we can maintain consistent references to your Area.

26	Basic Information		
27			
28	Author's Information:	This info is embedded into your KML and helps search engines index your KML layer.	
29	Name/Organization	Global Underwater Explorers GUE Project Baseline	Your organization name or the author's name
30	Website URL:	http://www.projectbaseline.org	URL/Link to your organization's website.
31			
32			
33	About your KML Document:		
34	Name:	Project Baseline: Wakulla Springshed, USA	Name of the top-level folder for this KML (short & sweet).
35	Snippet: (optional)	Project Baseline: charting our past to save the future	Short blurb under project name in 'My Places' (optional). Plain Text only.
36	Description:		Short description of your project (recommended). HTML OK.
37	On by default?	No	(Yes/ No): Should all placemarks be visible when loaded?
38	Open by default?	No	(Yes / No): Should top-level folder be open/expanded when loaded?
39			
40			
41	Google Maps Compatibility		
42	Compatible with Maps and old versions of Earth?	yes	(Yes / No)
43	- If yes: your placemarks will work in Maps & all version of Google Earth (3.0 - current), but will make a larger KML file. - If no: Will make a much smaller KML that will work in Earth 4.2+ only. Warning messages are given to Google Maps and older versions of Google Earth. - You can customize these messages in the "Advanced/Optional Settings" below.		
44			

5. Scroll down further on the “start here” sheet, and you will find a section for setting a custom “LookAt” view (the view of your Area’s layer in Google Earth when it opens). The view pre-loaded in your Spreadsheet Mapper is for the “Wakulla Springshed, FL” Project Baseline Area; it is included here to give you an idea of a good starting view. As you can guess, your LookAt view will be different for your Area.

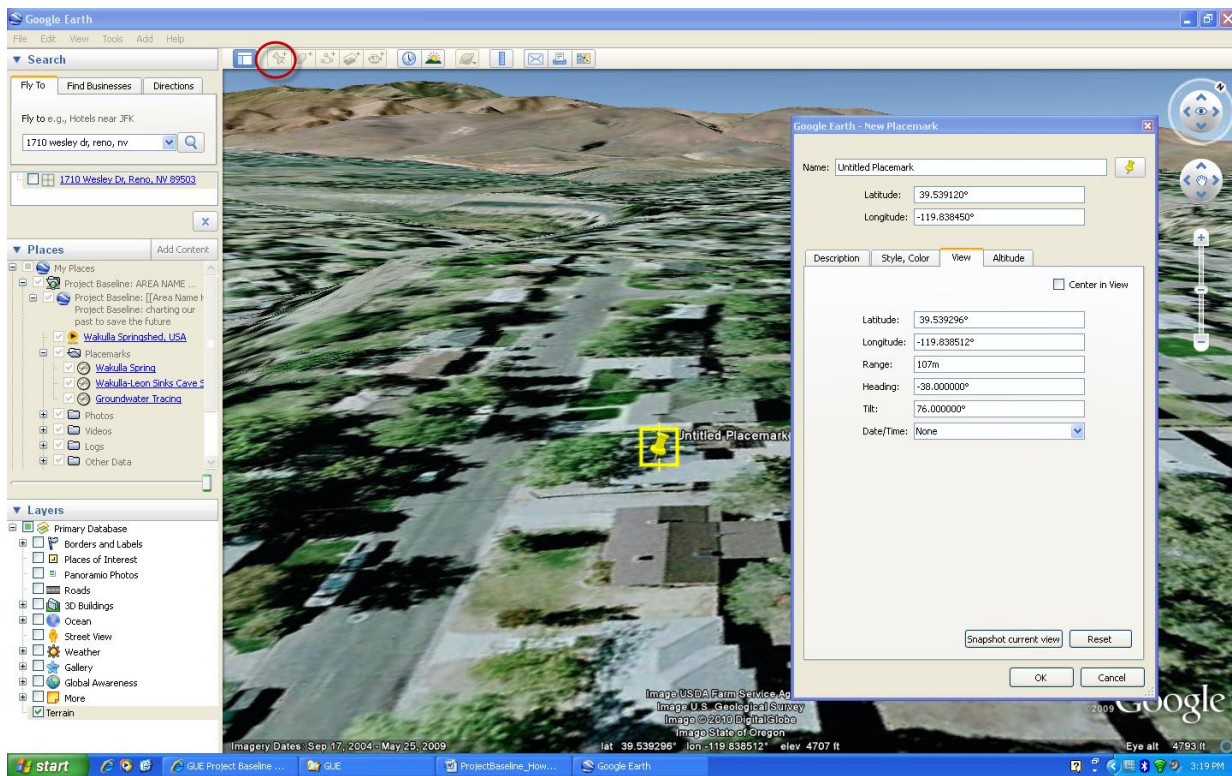
51	Custom "LookAt" view: (optional)		Set a custom view for this KML project. Otherwise Google Earth flies to a default view.
52	Longitude:	-84.166043	
53	Latitude:	30.215791	
54	Range:	49872	
55	Tilt:	0	
56	Heading:	0	
57			

Using the following steps, play with different zoom levels and angles in Google Earth until you find something that shows a nice high-level view of all the Placemarks in your Area, without a lot of extra land around them.

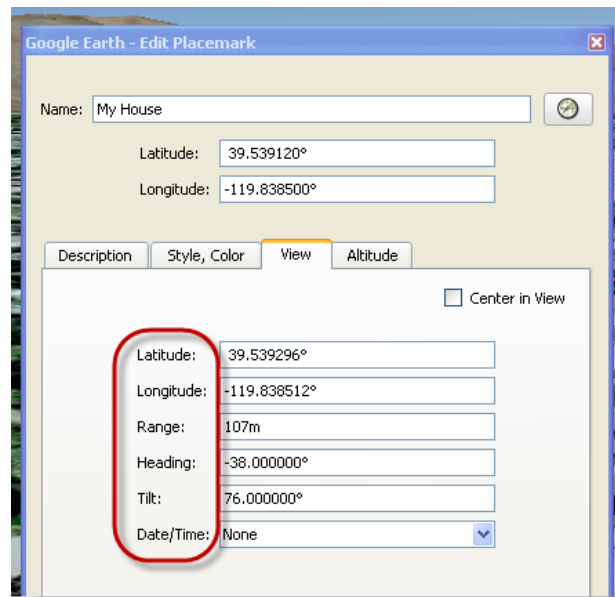
Setting a Custom LookAt View

It is important to set a custom LookAt view for YOUR layer on the “start here” sheet (you’ll also use this process to identify LookAt views for individual Placemarks on the “PlacemarkData” sheet, but more on that soon).

1. Open your Google Earth browser and use the navigation tools to set a view that you find compelling that includes all the Placemarks in your Area.
2. Now, add a Placemark by clicking the pushpin icon at the top of the window.
3. In the “New Placemark” dialog box that displays, select the tab titled “View.” Here you will see the key information Spreadsheet Mapper needs for its camera angle of your area.



4. Note that the order of the attributes in Google Earth is just slightly different than those in the “start here” and “PlacemarkData” sheets of Spreadsheet Mapper!



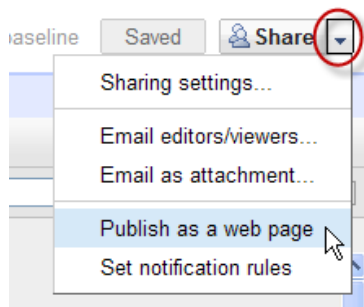
Custom "LookAt" view: (optional)		Set a custom view for this KML project. Otherwise Google Earth flies to a default view.
Longitude:	-84.166043	
Latitude:	30.215791	
Range:	49872	
Tilt:	0	
Heading:	0	

View/LookAt variables (optional)						
latitude	longitude	altitude	range	tilt	heading	
30.215791	-84.166043	0	49872	0	0	0
30.235537	-84.301658	0	341	70	81	
30.246196	-84.249284	0	23192	0	0	0
30.202503	-84.142558	0	51479	0	0	0
30.235537	-84.301658	0	341	70	81	
30.235537	-84.301658	0	341	70	81	
30.235537	-84.301658	0	341	70	81	
30.250685	-84.322379	0	151	54	175	
39.539296	-119.838512	0	107	76	-38	

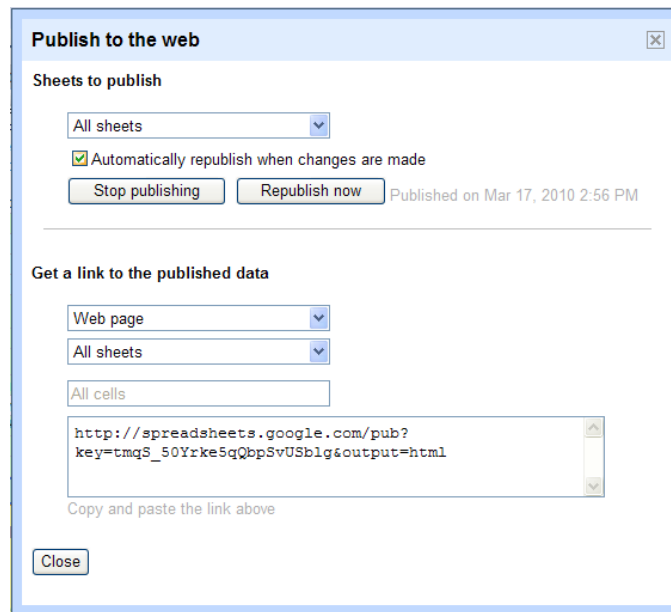
Next, we will look at the process for publishing your Spreadsheet Mapper so that Google Earth can reference it.

Linking Spreadsheet Mapper with Google Earth

Re-publishing your document updates it for the world. While anyone can see the data contained in your Spreadsheet Mapper, only the Area Coordinator and the Project Baseline Coordinator can make any changes. Publishing is what makes the network-linked KML produced by the Spreadsheet Mapper possible. The Spreadsheet Mapper for your Area has already been published by the Project Baseline Coordinator so that the initial network link could be created. We will be able to support you as you grow your Project Baseline Area, since we will retain access to your Spreadsheet Mapper and associated Google Earth layer.

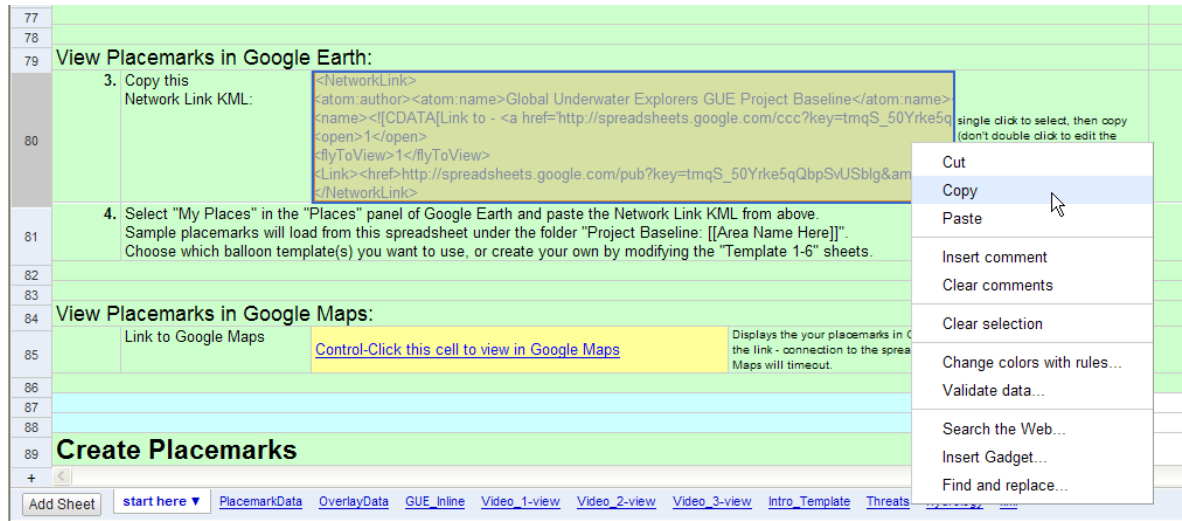


1. From the upper right corner of the spreadsheet window, click the “▼” button next to **Share**, and select “Publish as a web page” from the drop-down menu.
2. Click the “Republish Now” button, then click “Close.”

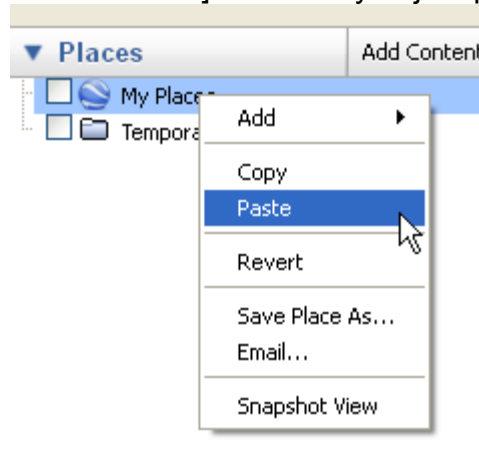


- a. **IMPORTANT NOTES:** Again, you are “re-publishing” the document because we have already done the initial publishing in order to establish a link to your Area’s Spreadsheet Mapper.

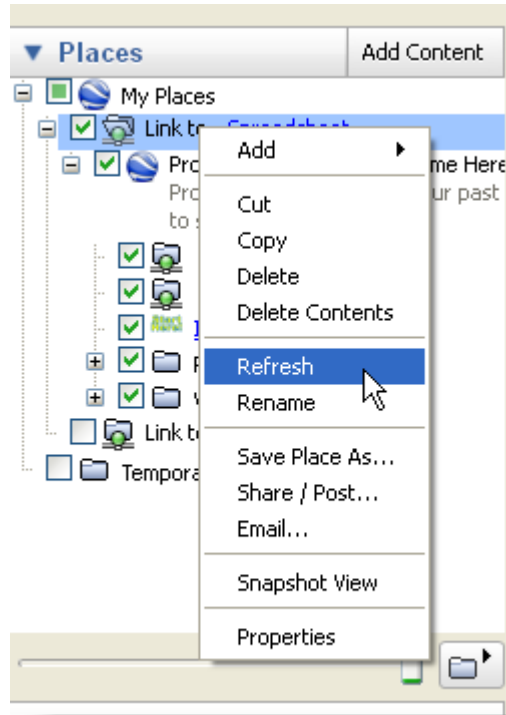
- b. You will repeat this process (clicking “Share,” “Publish as a web page,” and “Republish Now”) every time you want to push subsequent changes in your Spreadsheet Mapper to Google Earth via the network link.
 - c. Even if the box is checked next to “Automatically republish when changes are made,” this does not happen reliably; you need to do the manual process to ensure your changes are published.
3. Now, copy the contents of cell **C80** (either by right-clicking and selecting “Copy” or by selecting the cell and pressing Ctrl+C). Alternatively, you can copy the network link that was sent you in the “Welcome” email—it’s the same.




4. Open Google Earth.
5. From the left side of your Google Earth window, right-click the blue globe in the “Places” pane, and select “Paste” from the drop-down menu. This will create a network link to the “Project Baseline: [your Area name here]” KML file you just published.



6. Your Project Baseline Area KML contains examples of Placemarks from the “Wakulla Springshed” Area to guide you in the creation of your own. Take a moment to look through each of these Placemarks to get an idea of how each template is used.
7. Any time you re-publish your Spreadsheet Mapper, you also will need to refresh this network link in Google Earth. Here’s how:



- a. Right-click the network link under “My Places” and select “Refresh” from the drop-down menu. If Google Earth can establish a link with the Spreadsheet Mapper document (meaning you have an internet connection AND the KML is intact), the ball on the folder will be green. If the connection is bad for one of the two reasons listed above, the ball will be red, like this: . There is also the possibility that Google Earth is being flaky. If your layer was just visible, or you know that no edits have been made recently, contact the Project Baseline Coordinator to see if it is a program-based issue.
- b. It is also possible to set your layer to refresh automatically. Right-click the network link in “My Places” and select Properties. Click the “Refresh” tab and select how often you would like the network link to refresh.

PlacemarkData: Building Placemarks Using the Six Balloon Templates

Outside of setting a custom LookAt view on the “start here” sheet, and possibly referencing overlays on the “OverlayData” sheet, *everything* happens on the “PlacemarkData” sheet. This sheet is set up to be “plug-and-play”—you simply choose a Placemark template and populate the required data, and Spreadsheet Mapper makes Placemarks. It’s the fastest, easiest, and most-consistent way to create and edit many Placemarks in one place.

The screenshot shows a Google Docs spreadsheet titled 'GUE Project Baseline'. The 'PlacemarkData' sheet is active. It contains a table with columns for Template Sheet Name, Template Name, Template #, and Unique Variables. Below this, there's a section for Error Check and a list of Placemarks with their respective folder names, names, coordinates, and addresses. The bottom of the spreadsheet shows a navigation bar with tabs for different sheets: start here, PlacemarkData, CustomKMLData, Template-Intro, Template-Main, Template-Photo, Template-Video, Template-Log, Template-Data1, and kml.

Template Sheet Name	Template Name	Template #	Unique Variables:
Template-Intro	Intro	1	Placemark Name
Template-Main	Placemark	2	Placemark Name
Template-Photo	Photo	3	Placemark Name
Template-Video	Video	4	Placemark Name
Template-Log	Log	5	Placemark Name
Template-Data1	Data1	6	> Placemark Name > D

Error Check	# / ID	Folder Name (optional) (use sort to keep like folders together)	Placemark Name (for label & Places list)	latitude	longitude	address	Template #	Enter template # in cell H10 to update Placemark Name
	p1		Wakulla Spring, USA	30.214368	-84.287422		1	Introduction
	p2	Placemarks	Wakulla Spring	30.2354	-84.302637		2	Wakulla Spring
	p3	Photos	Photos: Wakulla Spring - tunnel	30.235548	-84.302593		3	Photos: Wakulla Spring - tunnel
	p4	Videos	Videos: Wakulla Spring	30.235312	-84.302803		4	Videos: Wakulla Spring
	p5	Logs	Log: Wakulla Spring	30.235461	-84.302817		5	Log: Wakulla Spring
	p6	Other Data	Hydrology: Indian Spring	30.25079962	-84.32208387		6	Hydrology: Indian Spring

1. Click the “PlacemarkData” sheet. Here is where you will enter data to build your Area. Loaded in your starter spreadsheet are several examples of Placemarks from the “Wakulla Springshed” Project Baseline Area. Let’s take a look at the key components of this worksheet.
 - a. The Placemark templates are referenced in cells **F2-F7**. You’ll notice these are the same as the templates listed along the bottom of the window. Each template corresponds to a number reflected in column **H**; up to six templates can be referenced and used within the corresponding Google Earth layer. *Never* make any changes to the templates.
 - b. In cell **H10**, you will indicate which unique Placemark variables Spreadsheet Mapper should display along the top row of the sheet so you can enter data in the appropriate columns. In column **H** of each Placemark, you will designate which template to use for the Placemark.
 - c. Column **C** designates the folder you want each Placemark to be assigned to. Placemarks of the same type should go in the same folder; for example, all Video Placemarks should go in the Video folder so users can easily reference that data type.

- i. Each monitoring location will have a Main Placemark, along with additional Placemarks for each of the data types available there. For example, if you have photo data from two vantage points as well as log data for a particular monitoring location, you would develop four Placemarks—one Main Placemark, two Photo Placemarks, and a Log Placemark.
- ii. Each Placemark will go into one of the following five folders (*exception: “Introduction” Placemark – see below*):
 - Placemarks [*this is the main overview Placemark for each monitoring location*]
 - Photos
 - Videos
 - Logs
 - Other Data
- iii. The “Introduction” Placemark for your Project Baseline Area should not be assigned a folder.
- iv. In order for Placemarks to group correctly into folders in Google Earth, they must be grouped together on the PlacemarkData sheet.
- d. You’ll notice that there are two columns entitled “Placemark Name” (columns **D** and **I**); column **D** is how the Placemark will be listed in the “My Places” pane, whereas column **I** is how the Placemark label appears when you hover over it in the map window. These should be the same, unless you want the name to appear differently in My Places and on hover.
- e. For Placemarks dedicated to a single data type (photo, video, log, or other), the Placemark name should be listed as follows.
 - i. Data Type: Placemark Name – Vantage Point (*for photos*)
 - ii. *Examples:*
 1. **Videos: Indian Spring**
 2. **Photos: Lost Creek – from shore**
 3. **Fish Counts: Northeast Reef 1A**
- f. For each Placemark, you will populate the cells in that row according to the column headers that correspond to the template number you select in column **H**.

- g. Columns **Z** and **AE** contain the references to your organization's logo and the name of your Project Baseline Area, respectively. The cells in these columns must be populated for each Placemark.
- h. Keep scrolling right across the worksheet and you will get to columns **AG**, **AH**, and **AI**, where you will indicate which Placemark is "Previous" and "Next" so users can easily navigate between Placemarks in a logical order (perhaps you will order them by data type, or group together Placemarks that are proximal to each other; it's up to you).
- i. Finally, in columns **AP-AU**, you can designate a custom LookAt view for each Placemark. A LookAt view is a camera angle; it describes for Google Earth exactly how you want the Placemark to be viewed, including the lat/long of the camera, its altitude, its distance from the Placemark, and its tilt. By setting a custom LookAt view, you cut down on the jitteriness associated with navigating between Placemarks; without one, the camera jumps around unnecessarily and distractingly. You might keep the camera at a relatively static point and pan around your Area to give the user an idea of how all the sites relate. It creates visual interest to tilt the camera angle instead of shooting straight down on the earth's surface.

2. Some hints for entering data are listed below.

Placemark Name	Description	Intro Photo URL	Intro Photo Title	Intro Photo Photograph
Introduction	Here is where you tell a high-level story about your Project Baseline area. You want to <i>draw in your audience</i> so they know why your area is important (culturally, ecologically, etc.), and how the baseline has shifted away from its historic position. You would also include a high level discussion of the threats facing your area.			
Wakulla Spring Photos - tunnel				

- a. Type "1" (without quotes) in cell **H10**. Notice how the headers change to reflect the data needed for the Intro template.
- b. Now double-click cell **J11**, under the "Description" column header. You will see some very simple HTML used in this cell. HTML is code that instructs web pages what to display and how to format it. Google Earth Placemark Balloons run on the same code.

You may find the following HTML tags useful.

- i. **text** : Any text included between the markup language will appear bolded.
- ii. **<i>text</i>** : Any text included between the markup language will appear italicized.
- iii. **text** : Any text included between the markup language will function as a hyperlink to the web address listed in quotes in the opening markup brackets.

- iv. `text` : Any text included between the markup language will function as a hyperlink to another Placemark within the Project Baseline Google Earth layer – you would replace the 2 above with the number of the Placemark to which you want to fly. The text in cell **O12** contains an example Flyto HTML tag.
- v. `
` : this language inserts a carriage return after text; for instance, if you wanted to do a double space between paragraphs, you would type `

` between the text you want to separate.
- c. Hit Enter to exit the cell, or click in another cell to stop editing it.

Now we will create four practice Placemarks using Spreadsheet Mapper, one using each of the following templates: Main Placemark, Photo, Video, and Log. The first one, for the Main Placemark, will take a little longer since it will be your first Placemark and this template has many attributes that need to be populated; don't get discouraged, you will get very fast at this process in very little time!

Google Docs interface showing the "GUE Project Baseline" spreadsheet. The spreadsheet is titled "Placemark Data" and contains a table with columns for Error Check, # / ID, Folder Name (optional), Placemark Name, Coordinates and/or Address, Template #, and Enter template # in cell H10 to update. The table lists various placemarks and their associated data.

Error Check	# / ID	Folder Name (optional) (use sort to keep like folders together)	Placemark Name (for label & Places list)	Coordinates and/or Address	Template #	Enter template # in cell H10 to update
				latitude longitude address		Placemark Name
	p1	Placemarks	Wakulla Springshed, USA	30.214368 -84.287422	1	Introduction
	p2	Placemarks	Wakulla Spring	30.2354 -84.302637	2	Wakulla Spring
	p3	Placemarks	Wakulla-Leon Sinks Cave System	30.235106 -84.302239	2	Wakulla-Leon Sinks Cave Sys
	p4	Placemarks	Groundwater Tracing	30.235534 -84.301562	2	Groundwater Tracing
	p5	Photos	Photos: Wakulla Spring - tunnel	30.235548 -84.302593	3	Photos: Wakulla Spring - tunn
	p6	Videos	Videos: Wakulla Spring	30.235312 -84.302803	4	Videos: Wakulla Spring
	p7	Logs	Log: Wakulla Spring	30.235461 -84.302817	5	Log: Wakulla Spring
	p8	Other Data	Hydrology: Indian Spring	30.25079962 -84.32208387	6	Hydrology: Indian Spring
	p9	Placemarks	My House	39.53912 -119.8385	2	My House
	p10					
	p11					
	p12					
	p13					
	p14					
	p15					
	p16					
	p17					
	p18					

The spreadsheet also includes a "Template Data" section with columns for Template Sheet Name, Template Name, Template #, and Unique Variables. The templates listed are Template-Intro, Template-Main, Template-Photo, Template-Video, Template-Log, and Template-Data1.

Building Placemarks: The “Main Placemark” Template

1. On the “PlacemarkData” sheet, type **Placemarks** in cell **C19**. The row corresponds to Placemark #9 (p9), and the column identifies **Folder Name**.
2. Use the Tab key, the right-arrow key, or your mouse to move to the next cell to the right. We are going to build a practice Main Placemark. Each monitoring location in your Area will have one of these Placemarks, which will describe the location and identify which data types are available. Enter the following data for Placemark #9, and be *sure to read the associated notes for each attribute*.

Column Header	Enter This Value	Notes
Folder Name	Placemarks	Folder options are <i>Placemarks, Photos, Videos, Logs, and Other Data</i> .
Placemark Name (for hover label & places list)	My House	Placemark Name refers to a single monitoring location in your Area.
Latitude	{Figure it out!} Example: 39.53912	Use Google Earth to determine the latitude of your house in decimal degrees. Enter the value in the Spreadsheet Mapper including the negative sign if applicable, but do not copy the degree symbol (°).
Longitude	{Figure it out!} Example: -119.83850	Same as previous, but repeat for longitude.
Address	Leave blank.	Not used for Project Baseline
Template #	2	As you can see from the legend at the top of your Spreadsheet Mapper, Template 2 corresponds to “Template-MainPlacemark.”
Placemark Name (for Balloon header)	My House	This should be a short meaningful name for the Placemark.
Description	{Enter a quick description of your house.} Example: My house is a typical house in a typical suburb of Reno, NV, USA.	For real Placemarks, this would be a brief description of the monitoring location that discusses the location’s importance and why it was included in Project Baseline.
Intro Photo URL	{Choose a web-hosted photo of your dream house.} Example: http://www.nationalgeographic.com/geographyofwealth/gallery/frafra/pic_01.jpg	This photo should be a representative photograph of the monitoring location.
Intro Photo Title	My House - from street, 1 January 2010 2:25 PM	Identify Placemark name, short description, date and time taken (if known).
Intro Photo Photographer	Chuck Norris	Identify photographer.
Continued on next page		

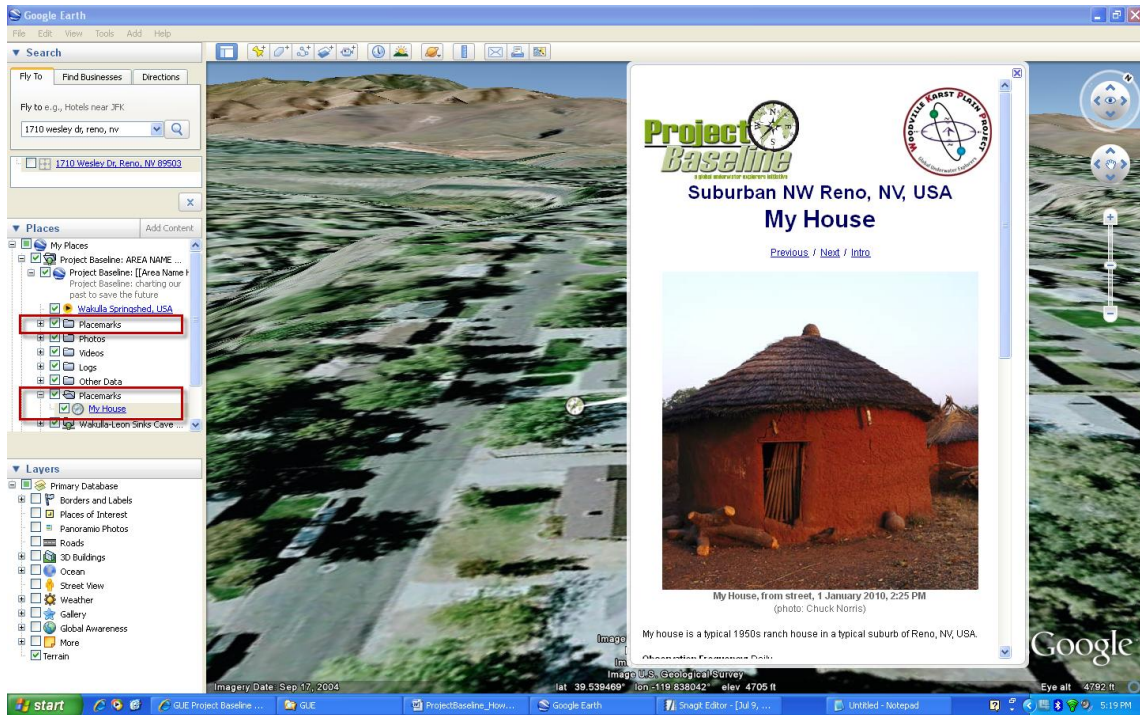
<i>PhotoData Placemark ID</i>	p10 {Number of the practice Photo Placemark you will create}	Clicking “Photos” text will fly user to first Photo balloon for this Placemark. If you do not have a certain data type for your Placemark, you must enter p1 in the Placemark ID reference cell!
<i>PhotoData Description</i>	Click “Photos” for time-series images taken at this Placemark (when the Balloon displays, click “Next” to tour through each vantage point).
1. From the tunnel	Each vantage point will have its own Photo Placemark, with coordinates set very close to, but not exactly the same as, the Main Placemark, so that they will all display when zoomed in. This cell contains a “Flyto” HTML tag (in purple) that takes users to the appropriate photo Placemark when they click the text. If there is no photo data for this placemark, replace the “Click Photos...” text with “Not available through this Placemark. Clicking the link will return you to the Introduction.”
<i>VideoData Placemark ID</i>	p11 {Number of the practice Video Placemark you will create}	If you do not have a certain data type for your Placemark, you must enter p1 in the Placemark ID reference cell!
<i>VideoData Description</i>	Click “Videos” for videos taken at this Placemark.	If there is no video data for this Placemark, replace the “Click Videos...” text with “Not available through this Placemark. Clicking the link will return you to the Introduction.”
<i>LogData Placemark ID</i>	p12 {Number of the practice Log Placemark you will create}	If you do not have a certain data type for your Placemark, you must enter p1 in the Placemark ID reference cell!
<i>LogData Description</i>	Click “Logs” for observational data collected at this Placemark.	If there is no observation log data for this Placemark, replace “Click Logs...” text with “Not available through this Placemark. Clicking the link will return you to the Introduction.”
<i>OtherData Placemark ID</i>	p1	If you do not have a certain data type for your Placemark, you must enter p1 in the Placemark ID reference cell!
<i>OtherData Description</i>	Not available through this Placemark. Clicking the link will return you to the Introduction.	“Flyto” link is to Placemark #1 in this example – clicking the link will take the user back to the Introduction Balloon! If there is no other data for this Placemark, replace “Click Other Data...” text with “Not available through this Placemark. Clicking the link will return you to the Introduction Balloon.”
<i>Site Info Link1 URL</i>	{complete web address of a link that is directly related to the Placemark} Example: http://en.wikipedia.org/wiki/Hut_(dwelling)	Include a link here only if it is specifically related to this Placemark.
	Continued on next page	

Building a Project Baseline Area

Site Info Link1 Text	{text you want to display instead of address} Example: Introduction to typical North-Central Nevada Architecture (Wikipedia)	This is the hyperlinked text that will display in place of the web address.
Site Info Link2 URL		Include a link here only if it is specifically related to this Placemark.
Site Info Link2 Text		This is the hyperlinked text that will display in place of the web address.
Partner Logo URL	{complete web address of your organization's logo image} Example: http://lh4.ggpht.com/_yUllubayM6E/SsUlfoPAgil/AAAAAAAAAnY/ZI3VhTGcRUQ/s800/wkpp_logo_hires_RGB.jpg	Logo must be no larger than 112 x 112 pixels. Picasa is a great place to store this image.
Observation Frequency	Daily	Indicate how frequently you visit this location (on average) for data collection.
Partner Link URL	{your organization's complete website} Example: http://www.wkpp.org	
Partner Link Text	{your organization's name} Example: WKPP Website	
Project Baseline Area	[Area], [State], [Country] Example: Wakulla Springshed, FL, USA	This will be the same for every Placemark.
Previous Placemark ID	p4 {# of previous Main Placemark}	
Next Placemark ID	p2 {# of next Main Placemark}	
Intro Placemark ID	p1	Always " p1 " – your Area Introduction Placemark
[Custom LookAt] Latitude	{Identify one!} Example: 39.539296	See Appendix – "Setting a Custom LookAt View"
[Custom LookAt] Longitude	{Identify one!} Example: -119.838512	
[Custom LookAt] Altitude	0	Altitude is always 0 .
[Custom LookAt] Range	{Identify one!} Example: 107	
[Custom LookAt] Tilt	{Identify one!} Example: 76	
[Custom LookAt] Heading	{Identify one!} Example: -38	

3. Now, re-publish your spreadsheet, refresh the network link in Google Earth, and check out your handiwork. If you copied the examples in the table above, it should look a lot like the following example.

- a. **NOTE:** In the “Places” pane on the left side of your Google Earth window, the new Placemark for “My House” shows up in a duplicate “Placemarks” folder; this happens because Placemarks that are intended for the same folder must be grouped together on the Spreadsheet Mapper.



4. Change the folder name for your practice Placemark to **Test**. This will keep them together on the Spreadsheet Mapper and in the Test folder in Google Earth.

Now, let's get started on the next three Placemarks for Photo, Video, and Log data. They will go much faster, since you have already learned how to enter almost all of the attributes needed for these templates.

Building Placemarks: The “Photo” Template

1. On the “PlacemarkData” sheet, type **Test** in the cell for **Folder Name** for Placemarks #10.
2. Call this Placemark, **Photos: My House**.

p9	Test	My House	39.53912	-119.8385	2
p10	Test	Photos: My House	39.539157	-119.838506	3
p11	Test	Videos: My House	39.539095	-119.838472	4
p12	Test	Log: My House	39.539132	-119.838567	5

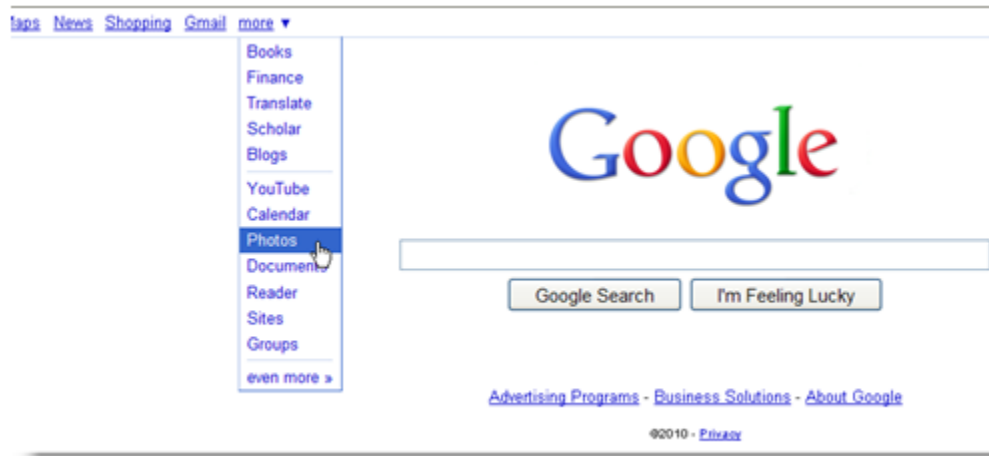


3. For the coordinates, set this Placemark very close to, but not exactly the same as, the Main Placemark for the **My House** Placemark that you just developed (you will do the same for your Placemarks for this location that use the “Video” and “Log” templates).
4. Choose the Photo template by typing **3** under column **H**. This template enables you to display a single photo or embed a Picasa slideshow of photos. Also type **3** in cell **H10** to update the column headers.
5. Enter a quick description of the photo(s) you will include.
6. Follow the instructions in the next three Picasa-related sections of the manual to generate and capture the web address for your image or slideshow. Paste it into the appropriate row under the column called “Slideshow Code.”
7. Enter the rest of the attributes according to the columns (these should look familiar!), and copy the LookAt view you developed for the “My House” Main Placemark.
8. Re-publish your Spreadsheet Mapper, refresh your network link in Google Earth, and check out your handiwork.

Accessing and Using Picasa

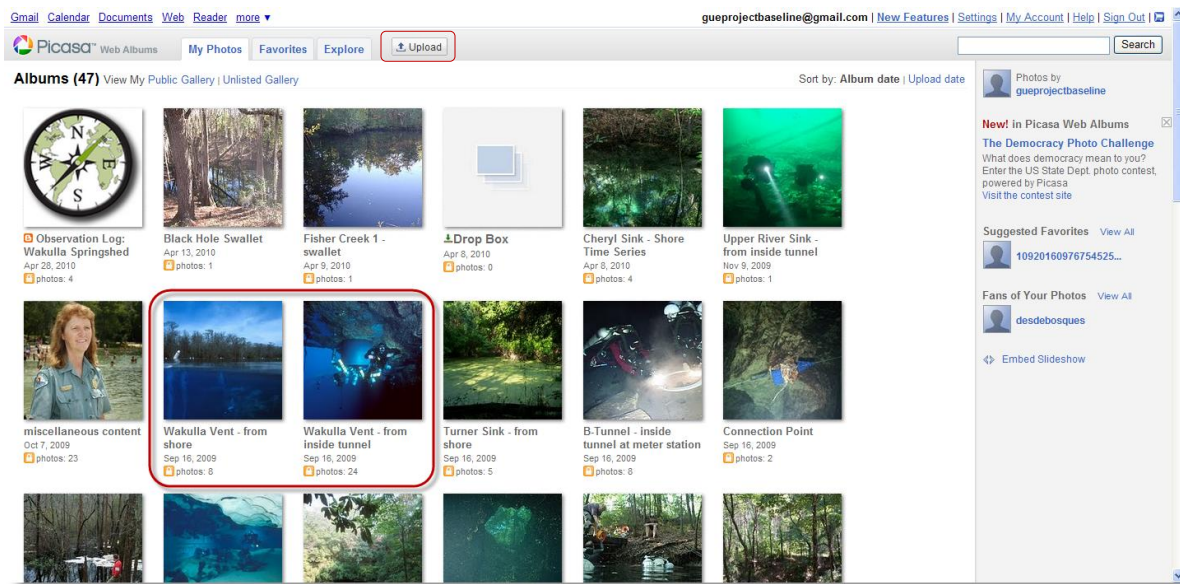
In order to display images (photos and slideshows) in your Placemark Balloons in Google Earth, you will need to provide a link in Spreadsheet Mapper. Here is the process for getting those links using Picasa.

1. Open a new tab in your internet browser and go to www.google.com.



2. Click “more ▼,” then choose “Photos” from the drop-down menu. The Picasa homepage displays.
3. If you have used Picasa before and you are logged into your account, you will see all the albums currently hosted in your Picasa account. If you have never used Picasa before, log in with your Google account information, then take a moment to read through the “Getting Started Guide” under the “Help” link at the upper right-hand corner of your window. We recommend downloading the Picasa software to your computer to facilitate easy cataloguing and uploading of your photos.

4. Upload new photos using the “Upload” button at the top of the Picasa window, then follow the on-screen instructions.

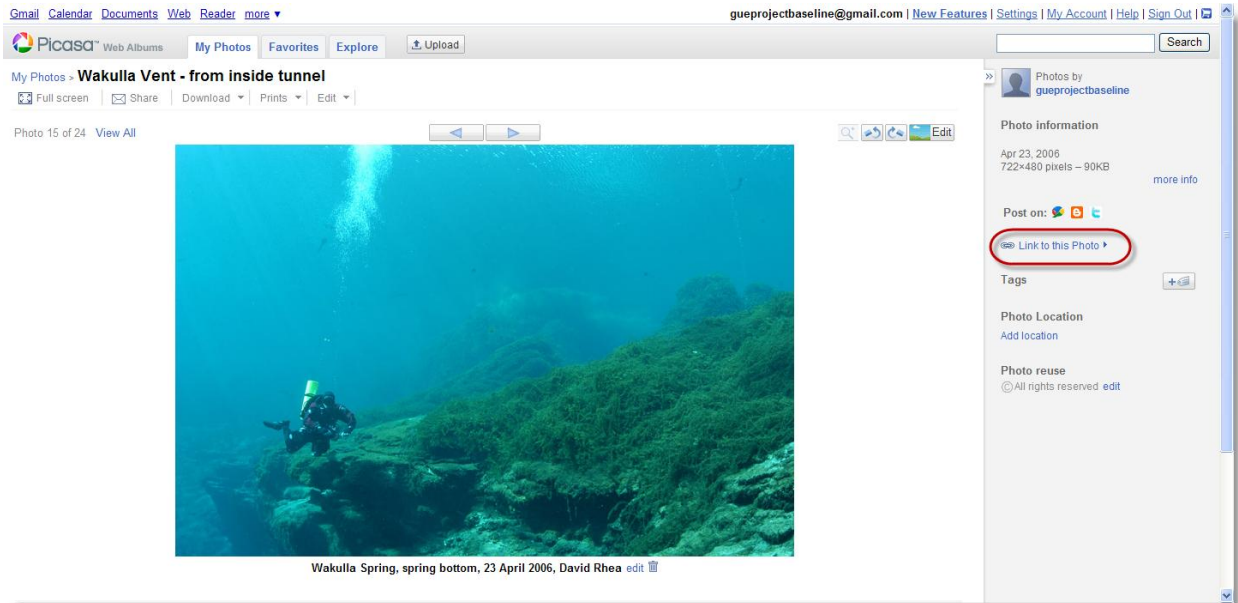


5. Important notes on photos:
 - a. Photos must be at least 400 pixels wide.
 - b. Photos should not exceed 1MB in size (large photos will take a long time to load in Google Earth).
 - c. Albums should be organized into separate folders by Placemark, and then by point of view. Over time, you will create a time-series of photos, taken from the same spot of the same subject, which will provide a fantastic record of changing conditions at each Placemark. Picasa enables you to create a slideshow within each album, so organizing your photos this way from the beginning will be very helpful.
 - d. You must include a caption for each photograph using the following format.
 - i. Placemark, subject matter (three to five words only!), date, time, photographer.
 - ii. **Example: Wakulla Spring, spring bottom, 19 November 2005 1:14 PM, David Rhea**

Linking to Single Images in Picasa

First, let's look at how to link to a single photo in a Picasa album.

1. Click any album, then click any individual photo within the album.
2. On the right side of the window, click "Link to this Photo." More options display.



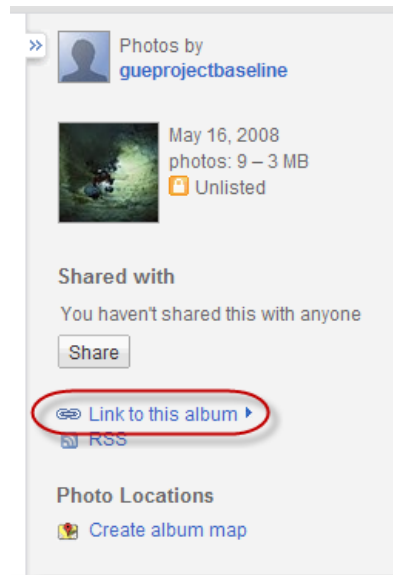
3. Change the size to "Medium 400px" and check the box for "Image only (no link)." Now, right-click the box under the words "Embed image," copy the text, and paste it into the appropriate cell in your Spreadsheet Mapper.



Linking to Slideshows in Picasa

Next, we will look at how to get the link for a slideshow.

1. Click on any album image from the main Picasa home screen displaying all your albums and the album will open.
2. Click “Link to this album.”



3. Now click “<> Embed Slideshow.”



4. When the dialog box displays, change the slideshow options to match these parameters.
 - Slideshow size = Large 400px
 - “Show captions” box *checked*
 - “Autoplay” box unchecked
5. Then, right-click the tan box under “Embed slideshow” and copy the text. Back on your Spreadsheet Mapper, paste the text in the appropriate row under column K.



Building Placemarks: The “Video” Template

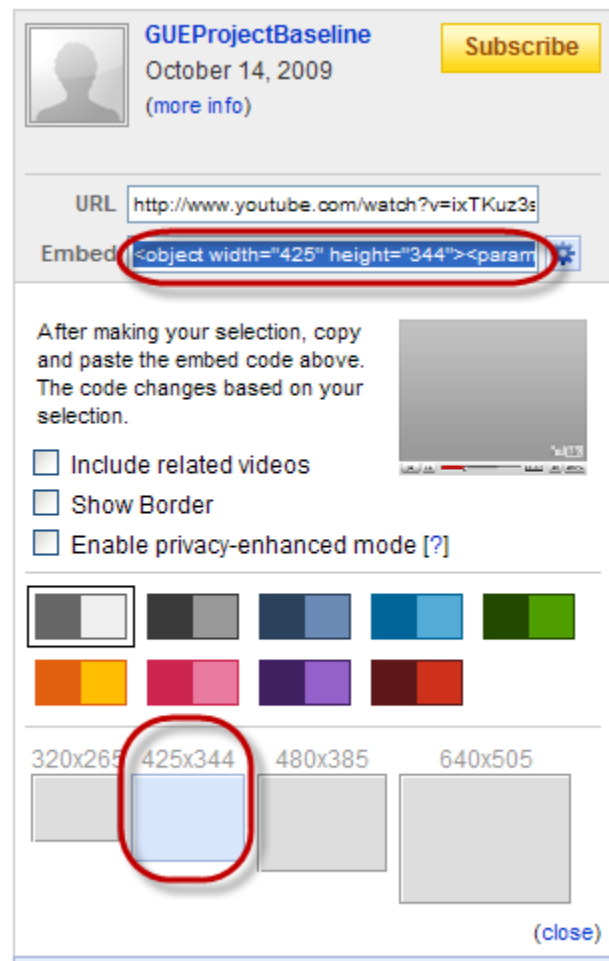
1. On the “PlacemarkData” sheet, type **Test** in the cell for **Folder Name** for Placemarks #11.
2. Call this Placemark, **Videos: My House**.
3. For the coordinates, set this Placemark very close to, but not exactly the same as, the Main Placemark for the **My House** Placemark that you just developed.
4. Choose the Video template (template 4). This template enables you to display a YouTube-hosted video. Also type **4** in cell **H10** to update the column headers.
5. Enter a quick description of the video(s) you will include (up to three lines in this template).
6. Follow the instructions in the next YouTube-related section of the manual to generate and capture the web address for your video. Paste it into the appropriate row under the column called “Video1 Code.”
7. Type a description of this video.
8. Repeat for Video2 and Video3 attributes, if desired, to include additional videos.
9. Enter the remaining attributes according to the columns (these should look familiar!), and copy the LookAt view you developed for the “My House” Main Placemark.
10. Re-publish your Spreadsheet Mapper, refresh your network link in Google Earth, and check out your handiwork.

Uploading and Linking to YouTube video

1. Go to www.youtube.com and click “Sign In” at the top right corner of the window using your Google credentials. You will have to establish a new YouTube account if you have not already; follow the instructions on-screen.
2. Upload videos to your YouTube account by following the instructions in YouTube.
3. Videos appropriate for inclusion in Project Baseline would be those that document the conditions at a Placemark or those that enhance a viewer’s understanding of environmental factors influencing your area. **Videos should be no longer than two to three minutes.** Do not infringe on copyrighted material (including images, videos, and music).
4. Browse to a video you would like to include in a Placemark.
5. On the right side of your screen, you will see the summary info for this video. Click the gear symbol to the right of the “Embed” box. Additional options display.

The screenshot shows the YouTube interface for a video titled "Hydrogeologist Interview - Dr. Todd Kincaid". The video player shows a man in a wetsuit and goggles. The page includes a search bar, navigation links (Home, Videos, Channels, Shows), and user options (Sign Out, Subscriptions, History, Upload). On the right, there is a channel profile for "GUEProjectBaseline" with a "Subscribe" button. Below the profile is an "Embed" box with a URL and an "Embed" button. A red circle highlights a gear icon to the right of the "Embed" button. Below the embed box are "Video Owner Options" (Edit Video, Insight) and a list of "More From: GUEProjectBaseline" videos. At the bottom, there are "Statistics & Data" and "Video Responses (0)" sections.

6. When the dialog box displays, change the slideshow options to match these parameters.
 - a. "Include related videos" box unchecked
 - b. Output size = 425x344
7. Now right-click the box to the right of the text "Embed," copy the text, and paste it into the appropriate cell in the Spreadsheet Mapper.



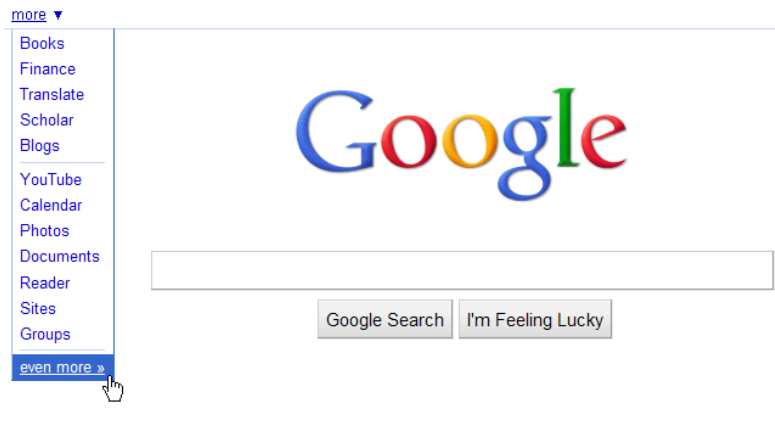
Building Placemarks: The “Log” Template

1. On the “PlacemarkData” sheet, type **Test** in the cell for **Folder Name** for Placemarks #12.
2. Call this Placemark, **Log: My House**.
3. For the coordinates, set this Placemark very close to, but not exactly the same as, the Main Placemark for the **My House** that you just developed.
4. Choose the Log template (template 5). This template enables you to display a website inside the Placemark Balloon; in this case, the website will be the Blogger observation log for this location. Also type **5** in cell **H10** to update the column headers.
5. Enter a quick description of the log entries available for this location.
6. Follow the instructions in the next Blogger-related section of the manual to generate and capture the web address for your log entries for this location. Paste it into the appropriate row under the column called “Log Code.”
7. Enter the remaining attributes according to the columns (these should look familiar!), and copy the LookAt view you developed for the “My House” Main Placemark.
8. Re-publish your Spreadsheet Mapper, refresh your network link in Google Earth, and check out your handiwork.

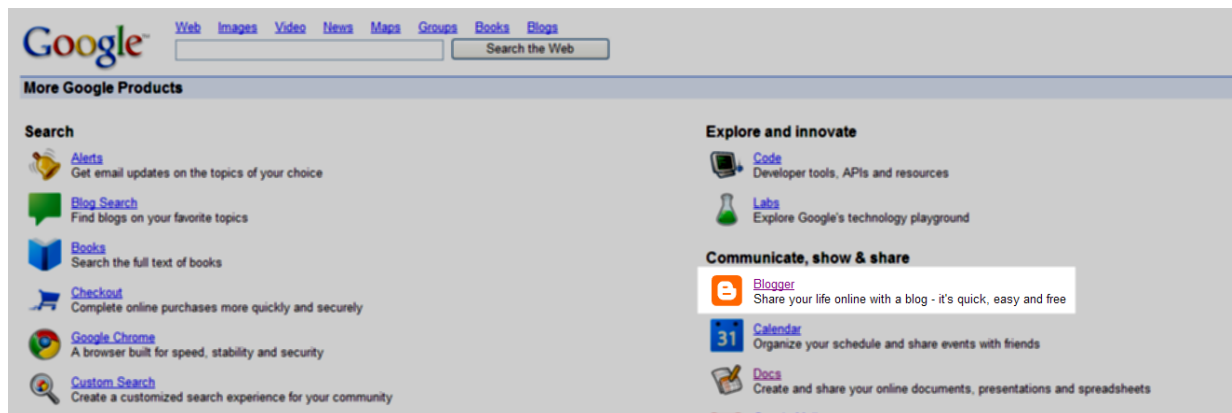
Using Blogger to Catalog and Display Observational Data

Note: when the Project Baseline Coordinator creates your Area-specific Spreadsheet Mapper, they will also set up your Area's observation log blog with the PB template and settings.

1. Go to www.google.com.
2. Click “**more ▼**,” then select “**even more »**.”



3. Click “**Blogger**” from the column of products on the right. The Blogger homepage displays.





4. Sign in using your Google account credentials. Your Blogger Dashboard displays.

5. Click **NEW POST**. The observation log template displays.



Observation Log: Wakulla Springshed

Posting Settings Design Monetize View Blog

New Post Edit Posts Edit Pages Comment Moderation

Title: **Indian Spring, 06/19/2010**

Edit Html Compose

b i [Icons] Preview

`Observer Name: ` **Complete log entry by typing text after template headings**
`Observation Start Time: `
`Observation End Time: `
`Weather Conditions: `
`Depth of Observations (indicate meters or feet):`
`Water Visibility (high, medium, low):`
`Water Turbidity (high, medium, low):`
`Water Current Direction: `
`Water Current Speed (high, medium, low):`
`Water Temperature (indicate C or F):`
`Notable Flora: `
`Notable Fauna: `
`Other Observer Comments: `

Post Options Labels for this post: e.g. scooters, vacation, fall **Indian Spring** Show all

Shortcuts: press Ctrl with: B = Bold, I = Italic, P = Publish, S = Save, D = Draft [more](#)

PUBLISH POST **SAVE NOW**

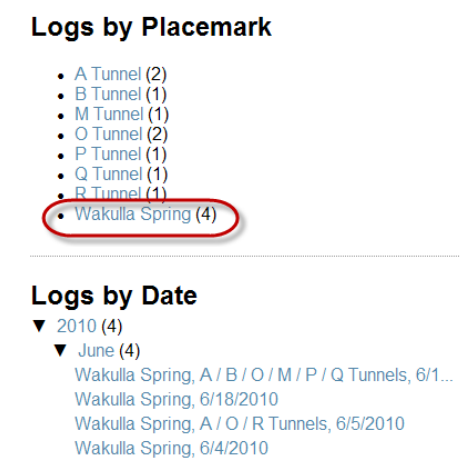
[Return to list of posts](#)

6. Type a Title for your log entry using the format, "Placemark, mm/dd/yyyy." Example: **Indian Spring, 06/19/2010**.
7. Complete the log entry according to the prompts in the log entry template. Type your text *after* the `` tag on each line.
8. Type the Placemark name again in the "**Labels for this post:**" section at the bottom of the log entry; this is how you will organize your posts by Placemark, and display them in the appropriate Placemark Balloons in Google Earth. If you reference multiple monitoring locations in your log entry, enter each of the locations in this "**Labels**" field, separated by commas.
9. If you would like to change the date of the post, click **Post Options** and change it. Otherwise, it defaults to today's date.

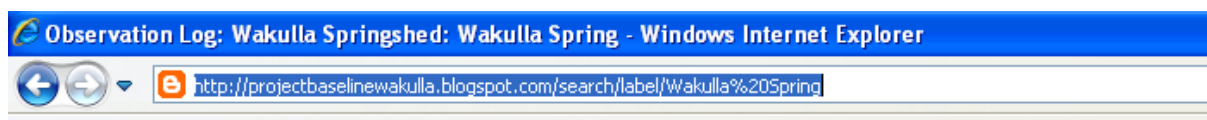
10. Click: **PUBLISH POST**. A confirmation displays.



11. Click **View Post** to view your handiwork, then scroll to the bottom of the page until you see **Logs by Placemark**.



12. Click the link for the Placemark you just created. You will now only see blog entries for this Placemark.



13. Copy the web address from the address bar at the top of your window and paste it into Spreadsheet Mapper in the appropriate cell under the header **Log URL**, in column **K** on the "PlacemarkData" sheet.

Building Placemarks: The “Other Data” Template

1. On the “PlacemarkData” sheet, type **Test** in the cell for **Folder Name** for Placemarks #13.
2. Call this Placemark, **Valuation: My House** (imagine that this is a data type that would be valuable for this layer).
3. For the coordinates, set this Placemark very close to, but not exactly the same as, the Main Placemark for the **My House** that you just developed.
4. Choose the Other Data template (template 6). Like the Log template, this template enables you to display a website inside the Placemark Balloon. Also type **6** in cell **H10** to update the column headers.
5. Enter a quick description of the other data available for this location.
6. Paste the full web address for any website that provides valuation data for your house (example: <http://www.zillow.com>).
7. Enter the remaining attributes according to the columns (these should look familiar!), and copy the LookAt view you developed for the “My House” Main Placemark.
8. Re-publish your Spreadsheet Mapper, refresh your network link in Google Earth, and check out your handiwork.

Adding Overlays

The Project Baseline Spreadsheet Mapper allows you to include advanced overlays in your Area's layer. An overlay is a KML file that is displayed over the Earth's surface in Google Earth; it might be a KML file containing points, lines, or shapes, or it might be a historical satellite image, or bathymetry of the ocean floor, etc. Overlays are a great way to show relationships between the Placemarks in your Area—get creative!

If you would like to create overlays, you can do so in Google Earth by positioning an image on the Earth's surface or drawing lines between points to create a boundary. Since this is advanced functionality that is completely dependent on what your organization's goals are for displaying overlays in Google Earth, this training manual will not cover the process for creating an overlay; please refer to Google Earth's help files.

You should also create a Placemark using Spreadsheet Mapper to orient users to your overlay and explain its significance and utility.

Once you have created your overlay, save it as a KML and load it to your server. If you do not have access to a web server for file storage, contact GUE and we can work with you to host the KML file(s).

Here is how to add links to overlays using Spreadsheet Mapper.

1. Click the "OverlayData" sheet.

Overlay Name	Overlay URL (KML/KMZ)	Generated Network Link	Concatenated Network Link
Wakulla-Leon Sinks Cave System	http://www.gue.com/files/basel	<NetworkLink><name><[CDATA[Wakulla	<NetworkLink><name><[CDATA[COAT
Wakulla Groundwater Tracing	http://www.gue.com/files/basel	<NetworkLink><name><[CDATA[Wakulla	<NetworkLink><name><[CDATA[COAT

2. This simple sheet allows you to include up to ten custom KML overlays within the Google Earth layer created by the Spreadsheet Mapper. In this sheet, there are two custom overlay KML files included as samples—one of the Wakulla-Leon Sinks Cave System and one of Wakulla Groundwater Tracing.
3. Enter an "Overlay Name" in column **B**. This is how the link will appear in "My Places" in Google Earth.

4. Enter the URL of the web-hosted KML file in column **C**.
 - a. **NOTE:** Google Docs does not yet allow you to host and link to KML files, so you will need to host this KML on another server of your choosing.
5. The sheet automatically creates a network link KML in cell **G4** and bundles it with the Area's network link. There is nothing else you need to do!

For Further Assistance...

If you need further assistance with creating your Project Baseline Area layer, or if you have ideas for improving the development process or the final product, please contact us! We are excited to help you tell your Area's story to the world.

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Appendix I: Roles & Responsibilities – “Area Lead”

The Area Lead functions as the point person for the dive group’s affiliation with Project Baseline. She or he is the contact person for coordination with GUE and is responsible for putting in place the infrastructure needed to organize and maintain monitoring data collected by the group’s divers. Additionally, the Area Lead is responsible for populating and maintaining the Spreadsheet Mapper with descriptions of each monitoring location and links to web-hosted data (photos, videos, logs, etc.). Finally, the Area Lead will ensure that the Area’s Google Earth layer meets the visual, technical, and functional requirements set forth by Project Baseline.

Knowledge

- Basic knowledge of characteristics and history of Project Baseline Area

Skills

- Proficient in basic personal computer operation, including use of spreadsheets, word processing, and internet applications
- Proficient in reading and writing English
- Prior experience with use of Google products (Docs, Picasa, YouTube, Blogger) helpful, but not required

Abilities

- Able to analyze problems and develop solutions
- Able to communicate clearly and professionally
- Able to work independently and as a member of a team
- Able to organize and manage multiple data types
- Able to coach and mentor others regarding appropriate data collection, integrity, and entry

Duties

- Ensures infrastructure is in place for upload and storage of monitoring data collected by dive group (using Picasa, YouTube, and Blogger, or other products)
- Ensures integrity of data to be used for Project Baseline, including quality, relevance, accuracy, and consistency of labeling
- Ensures functionality of the Google Earth layer generated by Spreadsheet Mapper, including navigation between Balloons and to web-hosted data
- Ensures all Area content adheres to style guide set forth in the most-recent version of the Project Baseline training manual
- Ensures execution of change requests identified by Project Baseline Coordinator

Appendix II: Project Baseline Application Form

After initial contact from a dive group, the Project Baseline Coordinator will send this form to the group to capture key information about the proposed Project Baseline Area. Upon receipt of the completed form, the Coordinator reviews for alignment of purpose with the Project Baseline Director(s) and schedules a webinar to welcome the group, review their initiative and application, and redirect as necessary.

***Application form not available as part of the manual at this time.*

*Please contact a Project Baseline Coordinator or Director for assistance. ***