1. Which properties need Baseline Documentation and why?

2. What skills should the team working on the Baseline Documentation have?

3. Annotated Table of Contents for the Baseline Documentation

**1. Which properties need it and why?**

A. All properties - both owned property and Conservation Restrictions - need (must have) baseline documentation.

Why? Future RGT Board members need to know exactly where the property is located and what is special about it (ecological, physical, geographical, cultural, social significance) and what are the anticipated problems (related to special features or people). If the property is a Conservation Restriction, the owner of the property and RGT must agree that this is an accurate description of the land at time CR becomes official (both parties must sign).

It is also a legal document available to the state and the IRS (if owner receives a gift-tax deduction.) Once the documentation is complete, it will need notarized signatures by the person compiling the report, the photographer, the land owner and one of the co-chairs of the RGT Trust board.

Whether owned by RGT or when RGT hold the CR, the goal of the baseline documentation is the same. A careful description of the property - the land itself, its relationship to adjoining properties, and habitats including soils, water table, flora/fauna, and anticipated future uses.

B. There is a logic to everything that is included in the Baseline Documentation

If it isn't immediately obvious, ask yourself what an RGT Board member who joins the Board 25 years from now would need to know (for example, why on earth was this property important to RGT, what did it look like then, who were the neighbors, where are the boundaries, etc.). That's what the Baseline Documentation provides.

C. If it is unclear what should be included, look at some of the other baseline documentation done for other properties in the past. They will vary a little from what you are being asked to do because we learned a few things over the years:

Information that is presented in an Excel spreadsheet is harder for someone unfamiliar with a property to understand. We now put the same information in Word format.

Mapping (the gps technology, the gis technology, and the materials available from the town and state) have improved dramatically. The maps may not look better now, but they sure are easier to do!

RGT has gone from photo documentation with film, to digital cameras, to apps or mobile units that put the gps location right on the photo. That makes life much easier. But the rule that each photo must be accurately named and accurately labeled in the documentation still applies.

**2. What skills should the team working on a baseline have?** (No one person will have all of these. Not all team members need to be/should be on the Board.)

Can get deed information (and surveys when they exist) on line from the Franklin County Deeds Office. These will be needed for all the neighboring properties and for the property being documented.

Can translate all those property descriptions in the deeds into useful information (rods to feet, survey notation on direction into compass direction, latitude/longitude in degrees and minutes into decimal degrees, etc.)

Can use electronic version of assessor's maps to locate owner (and abutting property owners) and match with the "page" and the lot numbers.

Can use a gps in the field to collect waypoints that are properly labeled so they can be used by the map maker.

Can use a compass in the field (electronic or magnetic - your choice). In order to be effective, must also have a copy of the map that has translated survey directions into compass readings (N 10 E = 10 degrees; N 10 W = 350 degrees). It takes time to think like a surveyor.

Can use gis software to download gps readings, combine them with survey/property description information/assessors maps and anything else that might be useful to make an accurate shapefile/boundary line of the property.

Can create clear maps.

Can use a camera to photograph boundary markers, areas of special interest and concern that are clear enough visually and correctly labeled so they can be used in the baseline documentation.

Can assemble photographs and narrative to tell the baseline documentation story.

Can organize the team and can work closely with the owner(s) of the property (especially if it is a CR) and neighbors to make sure that there is a clear understanding of the process and an opportunity for all to participate.

**2. What should be the sequence of work?**

A. Inside work. There is "desk work" that can be done on rainy/snowy days OR before it is appropriate to be spending lots of time on land that is still not under contract. This work included:

Historic research on the deed history of the property (keep an eye out for any easements (allowing a powerline or neighbor to go through the property, for example) or liens (back taxes, wetlands restoration, etc) on the property). See if there is any reference to a survey that you might be able to find. Download these property deeds in a folder set up for that purpose. Include in that folder an excel file with full name, and deed reference and maybe a note about anything of interest. You might want to check older maps or look for historic photographs as additional sources of historic information. Once you have a map with a key (letter of the alphabet for each corner), you can annotate a copy of the deed. Believe me, it will save you time later. Also see note on oral history from the owner in the Table of Contents section below.

Find and annotate the assessor's map for the property

As soon as possible, develop a map (gis or hand-drawn if necessary) and establish the alphabet code you will use so that you can coordinate each property corners with deeds, photographs and gps readings - this will make life much easier later.

Find all the neighboring deeds, downloading them to a "neighbors" folder and making an excel file of all abutters: name, address, acreage, page and lot number from the assessors maps; book and page number of the most recent appropriate deed. Be sure to download any surveys of the neighbors' lands - these are invaluable when the property being acquired does not have a survey.

Spend time with contour, natural heritage overlays, and especially photos of the property. Look for potential wetlands, ravines, special places, any place that you should be sure to visit when on the land. (orthophoto = any aerial or satelitte photograph that has been corrected to remove the curvature at the edge of the image. It is a necessary step in stitching together individual photographs so they can be used with each other and overlaid with other maps.)

Review the CR (even if in draft form) or the property deed if the land is owned by RGT (often you won't see the deed until closing and sometimes they say nothing about how the land is to be used). In both cases, make an abstract of that deed. (There is a template listed below - but basically, what is special, what must be done by RGT, what is not allowed). Knowing this information, may help you decide what to look for when you are doing the baseline mapping and photography. If no restrictions on some owned property, then say that.

Make the list of RGT Board discussions about the property (this is not just an exercise in looking in the archives, it demonstrate that the Board considered the property carefully). This job is best done by a Board member who has access to Board minutes. And it is best done from the beginning - rather than having to re-read all those exciting minutes! If it is a CR, also include dates of contact with the owner.

B. Outside work.When you are doing the baseline on the property. (Ideally when leaves are off and minimal snow - in fact, whenever you can)

Ideally you will be visiting the land frequently when RGT is first negotiating ownership or a Conservation Restriction. Although these are not official baseline visits, it is wise to have a gps (and extra batteries), a compass, as good a map as you can get, a camera (and extra batteries or portable charger or whatever you use), and pencil/paper for taking notes on ALL these trips - it will allow you to gps/photograph boundaries you might find, or areas that are of special interest or concern. Just a photo of the group walking the land is nice to have.

When appropriate include the property's owner (for CR) or former owner (for RGT-owned) in the walks. AND the neighbors if that is appropriate. (If CR, ALWAYS inform/ask permission of the owner - every trip.)

After each trip, put together what you have done by updating maps and photo/narrative. Maps should use standard conventions including property boundaries with any compass/distance information available, indication of all boundary markers found, north arrow, scale, and appropriate labels. Doing that will tell you what you have missed or are unclear about. Make sure that you document any unusual features that might cause concern later. (If the household dump was already there, future RGT monitors need to know that so they won't think it is a new event.) Make sure you document potential problems (road where dumping might occur, for example). Go back to the CR or deed to see if everything mentioned as special has been documented.

It is very important to ask others with specific knowledge (wetlands, geology, plants, birds, tribal ceremonial landscapes, farming history) to walk the property with you, Ideally those folks would contribute a short survey/set of observations - but at least you will have new insight into the property.

C. The last part (the 5% that takes 95% of the time)

The maps. (See note in B about using standard map conventions.) There are a number of different maps needed. While all will use the same shapefile that will be developed from a combination of the assessor's map, the gps readings of all corners, the deeds, and just your time banging around the property, the labeling needs to be especially good on the "monitoring map" which is the one future members of the Board will use to find the property next time. It takes time to get them all correct and easy to read. If a CR, have the owner check the maps to see that they are accurate. Should also do this with owned land if you have access to the owner. Also see notes in the Table of Contents below about making maps.

The packet of materials needs to be put in clear order (see Table of Contents below) for both the electronic version (which goes on the Board-only part of the website) and the paper version (2 copies for RGT and, if it is a CR, one copy for the owner(s) - or more copies if owners don't live together.

The photographer(s) needs to make a CD of ALL original photographs arragne to have a notarized signature on the CD - that signature means "I didn't photoshop these."

The signing has to be scheduled:

For a CR, this should happen when the Leverett Select Board signs off on the CR. The property owner and RGT sign off on both the CR and the baseline data. All signatures must be notarized.

For an owned property, it can happen at a Board meeting with a notary present or some other way but, ideally, when the deed is registered.

**3. Annotated Table of Contents** *(Annotations in italics)*

Baseline Documentation Report:

*.... (name of property)*

*..... (owner of property or CR - if CR then also holder of CR)*

*..... (date baseline complete)*

1. Location of property

Map (*of town with property clearly marked and written directions from Town Hall)*

Description

*(street address, acreage, tax assessor's page/lot number(s)*

*anthropogenic structures (describe briefly or just say "none")*

*one-line descriptions of:*

*physical description (topography, streams, water table, geology)*

*special features - could be habitat, species, views, cultural history, contiguous conserved properties, whatever - one per line. If this is a baseline for a CR, then make sure that each purpose listed in Section I, is included.*

2. Maps of property (*Each on separate page. Created in GIS software of your choice using a combination of MassGIS base maps and the shapefiles you created when doing the baseline documentation)*

Map with both the property and Nearby Protected Areas photo/aerial/satellite map *(orthophoto is just the process that adjusts aerial or satellite photos to account for the curvature at the edge of the image so that they can be matched up to neighboring photos.)*

Topographic map *(the USGS* *topo maps are very out-of-date, but still are interesting)*

Contour map *(lines from topographic maps, but no features have to add streams, roads, etc. from Mass GIS)*

Map of the property with Natural Heritage Priority Habitat (NHESP, 2008) and NHESP/TNC Biomap2 (2011) overlays *(or whatever the most recent version is. NHESP = Mass. Natural Heritage and Endangered Species; TNC = The Nature Conservancy)*

Surveys of property *(If there is one. Sometimes neighbors’ properties are helpful. Chase down every survey mentioned in the deeds. Usually they are registered in the Reistray of Deeds Plan Books, but sometimes have to be located by chasing down who did they survey. Owner sometimes has unofficial, but useful surveys.)*

3. Brief History and Description of the property (*on separate page - or longer if possible.*

*With CR either have owner write, or at least provide you with the oral history that you include. If property will be owned by RGT, get information from owner as well. You will often need to go beyond that to old deeds, town history, old maps, old photographs, etc. but oral history is incredibly useful.)*

4. Deed and Abstract

*This is sometimes one of the last things to do, but it there is often a draft CR that can be used temporarily. Still there might need to be changes once the final CR Deed or ownership Deed is registered. Note: the Abstract is very useful when you are out collecting baseline data and to future monitors. It should include:*

name of property

Note: This abstract is designed to help with monitoring, for more information see the Deed itself*. (keep this "note" on the page)*

ownership *(if CR, name of property owner and holder of CR; if owned, then just owner)*

Property location:

Acreage:

Date Deed Recorded: Registration Book # and Page #:

Summary of Restrictions:

Purposes:

Special Prohibitions or Requirements:

Reserved Rights:

By Right:

With Notice:

With Approval:

Are any Rights of Public Access included:

If so, are there any limitations?

5. Relevant Deeds: *(property itself. both most recent and those of historic interest)*

6. Boundary Information and Photographs of Property Lines and Sites of Special Interest

*This is the most important part of the Documentation and will take you the longest. To get a pretty-good map requires:*

*the deed description (usually "exhibit A" in the deed)*

*any survey of the land or other properties that border the land*

*the assessor's map with their version of boundary lengths - which might be correct*

*a draft map based on these documents with translations of rods to feet or whatever else is necessary*

*gps waypoints of all corner found - take the draft map with you. If possible label the waypoints with the alphabet on the map - if that doesn't happen can changes labels later - but it is a nuisance*

*gis draft map that uses waypoints - start checking the gis shapefile against the draft map. If you get it right the first time, send away for a Nobel Prize*

Monitoring Map: *Include: line length and compass direction, corners (and a description of the corner marker), Sites of Special Interest/Concern. Use alphabetical labels for corner - the labels on the map should match the labels on the map showing photographs, should match the document with the photographs.*

Map showing where photographs of corners/lines/special areas were taken

Photographs of Boundaries and Sites of Special Interest *This should include all corners (following the alphabet labels on the monitoring map. Each photo should have description, date taken and lat/long from gps. There should also be a gps waypoint file that has all the corners using THE SAME ALPHABET LABELS. And there should be a gps polygon file of the property (taken from gps waypoints and sometime tracks not just from assessor's map.)*

7. Signature Pages (writer, photographer, if owned, the RGT rep, if CR, both the property owner, CR holder) (*Note: these must be notarized. For CR ideally at the Selectboard meeting when the select board signs off as well (if private land also have owner there). Otherwise perhaps at Board meeting if there is a notary on the Board. Photographer signature includes signed CD with photographs taken - both those used and those not used.)*

Appendices:

A1. Log of contact with land and land owner and dates of Board meetings where property was discussed (*when RGT is in process of acquiring land or CR was being written/negotiated oh, don't you wish you had remembered to do that earlier - now you have to go back through RGT Board minutes. . . . do as table or excel file)*

A2. Assessor’s Map: page.... lot number.... (*copy the useful part of the assessor's map, and label)*

A3. Neighboring (abutting property) Deeds:

Map showing all abutting property owners names (and book/page of deed)

List of Abutter Information (name, address, acreage, deed book and page number, assessors page and lot #)

Deeds (for all abutting properties)

A4: Inventories *(flora/fauna, could also be geology, cultural history artifacts, if the property is under Chapter 61, there might be a forest inventory available.)*

Mary Alice Wilson, Angelo Teachout, July 2015