Document Contents.
Order of Events.
Background and Context.
Summary Feedback from PI's and Steering Committee.
Prioritized Georeferencing Scope Items.

Order of Events: Scope Questions for Georeferencing – Need Prioritization.
1. Original documents produces at the iDigBio IT Standards workshop March 2012, Georeferencing Working Group of Reed Beaman, Nelson Rios, John Wieczorek, Deborah Paul, Dennis Xu and Elizabeth Martin.
2. Cost estimates added at the request of Pam Soltis and Reed Beaman.
3. Context and Prioritization (see next) added by working group at the request of Larry Page and the Steering Committee.
4. Steering Committee Feedback Summary from Steering Committee / PI meeting 17 August 2012.

Background and Context.

At the IT Standards workshop, March 2012 in Gainesville, the initial members of the iDigBio georeferencing working group met to coalesce the current georeferencing needs of the nhc community. At the meeting, a list of items was created and Jose Fortes requested we prioritize the list. *You can see the entire list* at http://www.goo.gl/x4TVY

From that list, the group created a list of **action items** presented at the IT Standards meeting that needed Steering Committee input to determine if the items were in or out of scope. In the document below, each item's status (in scope or not) is listed. Next, Pam and Reed asked the working group to put hard dollar costs with the items. Then, Larry has stepped in to ask that we prioritize the items and provide some background and context on each item.

Note items are now in Priority Order.

The Steering Committee and PI's met with 2 members of the working group, Deborah Paul and Reed Beaman to discuss the prioritized items and associated funding requests. Next is a summary of the discussion of each item in the list. The prioritized list is at the end of this report.

Summary Feedback from PI's and Steering Committee – 17 August 2012

Item 3 – Train the Trainers Workshop – **_in scope and funded_** and plans for this workshop are in progress. Note there are funds to do a second workshop within this fiscal year.

Item 5 – "Does iDigBio create online training content?" The working group asked for a funded meeting after the above workshop in order to use the outcomes of the workshop and workshop surveys to create a materials development plan. This syllabus is intended to guide the working group and outline needed funding to accomplish creation of the training materials. The steering committee agrees this is within scope and funding exists to cover the expected travel, lodging and per diem costs for key members of the working group to meet for this purpose. <$6000.00

Item 8 – "Does iDigBio prepare/improve/organize existing non-software materials?" The steering committee would like to have us revisit this item after the Item 5 meeting.

Item 1 – " Does iDigBio make recommendations for effective practices?" In essence, this is a request for support to update the Best Practices Guide for Georeferencing. The committee would like us to re-evaluate this item after the workshop. The steering committee asks if the persons involved are open to a wiki-type version (non-static) that could be updated and also if a partnership with GBIF to work on this is fitting? It is not in the scope of current budget. A supplement request for the funds would need to be submitted and the committee finds this is likely feasible but they'd like feedback about the wiki question and GBIF participation.

Item 7 & 6 – "Does iDigBio develop a geographically-based georeferencing expert/support network? Does iDigBio maintain a training expert base/support network with qualifications/skill tracking?" The committee agrees that Version 1 of this is to be an outcome of the 1st (upcoming) workshop – as a list of participants. The funding question was not addressed thoroughly and some were not sure of the need for funding. The steering committee would like to know more about how vetting of the people on the list would happen? Some suggest an open community-based model for vetting, encouraging the community to vet itself.

Item 4 – "Does iDigBio develop outreach materials associated with crowdsourcing?" Please re-evaluate after the workshop and discuss with Specify and Symbiota b/c of their plans to be involved in crowd-sourcing.

Item 11 – "Does iDigBio develop a georeferencing cost calculator?" The steering committee likes better the idea of a table or sort of checklist and asks if that might be a possible outcome of the 1st workshop? The checklist would be a list of items that need to be considered when computing possible costs. They liked the idea of creating a table showing prior projects with costs/specimen – that could be added to by new projects.

Item 5A - " Does iDigBio create testing sites?" The steering committee has more questions about this. It would be down the road – more discussion is needed. The committee asks if it's possible / probable for the a partnership from someone like Robert Hanner for Distance Learning / Distance Education materials development? And would he participate perhaps as a member of the working group? or would funding need to be considered for his participation?

Item 10 – " Does iDigBio repatriate community-provided georeferences?" – This is an item to be revisited in the future.

Item 9 – "Can iDigBio work with GBIF to get the data cleaned?" GBIF code to clean is not well-documented – so not in a state that is easily usable by iDigBio. Others suggest BISON may help with this or perhaps CRIA?

Prioritized Georeferencing Scope Items.

Item #	Scope	Item detail with some background and context.	Priority	Cost / Comments
2	yes	Does iDigBio provide training to georeference? While this item is determined to be in scope, the georeferencing working group feels the main emphasis ought to be on training more people in the community how to teach others to georeference. **(see next).**		
3	yes	Does iDigBio Provide training to trainers, to expand the number of people capable of giving workshops? iDigBio's first Train-the-Trainers workshop is set for October 8 – 12 in Gainesville. 30 participants: 19 TCN attendees, 4 non-TCN persons from the greater natural history collections community, 4 trainers and 3 iDigBio staff attending. See a map of participants by affiliation at http://maps.google.com/maps/ms?ie=UTF&msa=0&msid= 216889594277472229182.0004c72c85e71daedc766	1a	>$1000.00 / person 5-day workshop
5	yes	Does iDigBio create online training content? This is a natural outgrowth of doing the train the trainers and crowd-sourcing work as well as hosting an installation of the GeoLocate collaborative georeferencing tools. It is complementary to item 4. The first version (v0) of these training materials can come out of videos from the first Train-the-Trainers workshop in October. ***More sophisticated, scripted materials are needed and the group can work together to create these***. We'd like to evaluate v0 and then, convene a focused 3 day work group to create a syllabus of needed training materials, then use that to decide priorities and costs. Probably about five people to do this. New Orleans (at Tulane) is a possible centrally located venue to meet. We'd use the current priorities list along with the outcomes of the Pre and Post workshop surveys to drive the production of the syllabus – and prioritize and plan production of the training materials to be created – with deadlines. (For example, should we begin with materials for training trainers, or start with materials that trainers can use to teach beginners).	1b	<$6000
8	yes	Does iDigBio prepare/improve/organize existing non-software materials? **This is already in progress at the iDigBio Wiki website**. Justin Mann, working for Nelson Rios at Tulane, is putting together a web page/s for iDigBio that will represent an up-to-date, well-organized set of existing georeferencing materials. These include online materials, powerpoints, pdf documents, videos…that everyone can use when georeferencing, teaching georeferencing, hosting a workshop, etc. Nelson's funds are limited and Justin's efforts are meant as a first pass to get this resource started. It will need more attention in the future to keep it current, add new materials and functionality.	2a	$0 Using iDigBio wiki, Tulane staff and community contribution. After 40 hours of work from Tulane staff member, Justin Mann, Tulane would need funds for him to do further work. The first 40 hours should be enough to get the basics published on idigbio.

8A	depends	Does iDigBio provide hosting for georeferencing.org? For now, this is the wiki site Justin Mann at Tulane is starting for us. (see 8 above). The first draft is done and the working group will be vetting in in the next 2 weeks to then put the result up on the iDigBio website well in advance of the first workshop.		
1	yes	Does iDigBio make recommendations for effective practices? After much discussion, this item is effectively a recognition that the most widely utilized Best Practices Guide for Georeferencing is in need of updating. For example, it needs sections added on how to plan a georeferencing project and how to estimate the cost to georeference a given number of specimens. While the current guide is quite thorough, the need to update with these new sections is real. If iDigBio is putting together effective practices – it is this guide much of the world-wide nhc community uses most for figuring out their georeferencing strategies.	2b	$20,000
7	yes, if done via Wiki	Does iDigBio develop a geographically-based georeferencing expert/support network? The first version of this can be started easily as an outcome of the first *Train-the-Trainers Workshop*. It will be a list of persons, their geographic regional georeferencing expertise and the fact that they have attended our workshop. It is intended to be a resource for the entire community to use when looking for people to help with georeferencing projects.	2c	
6	yes, if done via Wiki	Does iDigBio maintain a training expert base/support network with qualifications/skill tracking? The first version of this can be started easily as an outcome of the first *Train-the-Trainers Workshop*. It will be a list of persons, their physical location, their georeferencing expertise and the fact that they have attended our workshop. It is intended to be a resource for the entire community to use when looking for people to help with georeferencing projects. Will always need QA / QC (vetting).	2d	**Combine Item Numbers 6 and 7** (below) Site content design: [40 hours@$100/hr] $4000 Maintenance: [1 hr/wk @ $100/hr] $5200 / year.
4	yes	Does iDigBio develop outreach materials associated with crowdsourcing? Many TCNs plan to utilize crowdsourcing to get their specimens georeferenced. Consequently, materials to address how this can best be accomplished need be developed in conjunction with the *Train-the-Trainers Workshops.* The TCN's have been asked to provide input with respect to their needs to ensure that the materials developed do meet their requirements.	3a	
11	perhaps in the future	Does iDigBio develop a georeferencing cost calculator? The community may find it useful to have a georeferencing calculator when trying to figure out how much it's going to cost to georeference a given number of specimen records. While this seems a great idea – it may be difficult to chase ever-changing costs (labor,for example). Further conversation in the working group considers the possibility that it may be faster, cheaper and just as useful to create a data table instead. Data in the table could be gathered from a survey (Shari Ellis & the GWG) of those who have done large georeferencing projects. The table would include # of records georeferenced, time to complete the project, how much money it took to do that number of records in the given time.	3b	JW: Basic calculator could be generated in ~ 100hrs@$100/hr =$10,000 following the work flow analysis described below. This could be a good topic for a paper.

5A	maybe	Does iDigBio create testing sites? This software, accessed via the web, would allow those newly-trained as well as others with more experience to test their georeferencing skills against a known and vetted dataset. The purpose would be to provide the community with a way to evaluate someone's skill level in a uniform way before they georeference a given dataset for their TCN or project. Distance Learning materials would help the entire (world) community with this issue. Robert Hanner, Professor at University of Ontario in Guelph, North American GBIF Node Representative and BOLD representative – works on Distance Learning materials and would like to work on these types of materials with us. Robert has been invited to attend the Trainers workshop in October.	3c	
10	perhaps	Does iDigBio repatriate community-provided georeferences? In the future, it would be great if the iDigBio portal makes it possible for users to download a dataset > georeference the records > give the georeferences back to iDigBio > that can then also be shared with the data provider (original resource). NR: This scenario also applies to any form of record annotation and is a much broader problem than georeferencing alone. (Think FilteredPUSH) NR, JRW, DB: Until iDigBio has a concerted georeferencing framework, this may be premature. Before a $ value can be applied to this some serious analysis and discussion is needed with iDigBio to determine what services they want to provide. **This could be big enough to qualify for it's own ABI grant.**	4	has to be done dataset by dataset. great service to make sure we can provide when we get to that version of the portal
9	no	Can iDigBio work with GBIF to get the data cleaned? GBIF does not have ready-to-use, well-documented software for cleaning georeferences ready to share with us for this purpose. If we want to use what they have, we are welcome to it, but it is not documented.		
12	not applicable no purchase necessary	Does iDigBio purchase existing licenses for applications for appliances? no licenses to purchase (see below).		

(dlp 7 September 2012)