Klamath Basin Fisheries Collaborative
Operating Guidelines

Adopted June 13, 2023

1. Background of the Collaborative

Dating to the 2007 Klamath River Coho Ecology Study, and further back to early tagging and monitoring of coho salmon (*Oncorhynchus kisutch*) in the mid 1990s, the use and tracking of passive integrated transponders (PIT) has expanded to many locations along the Klamath River and its tributaries. In Oregon, researchers have used PIT tags for several years to monitor Chinook salmon (*Oncorhynchus tshawytscha*), Lost River suckers (*Deltistes luxatus*), shortnose suckers (*Chasmistes brevirostris*), steelhead (*Oncorhynchus mykiss*) and other fish species in Upper Klamath Lake and associated tributaries.

The emergence of the Klamath Basin Fisheries Collaborative (hereafter, "KBFC" or the "Collaborative") reflects an ambitious effort by many partners to monitor and evaluate Klamath River restoration opportunities in the face of an ecological system in crisis and several imperiled fish species requiring Endangered Species Act (ESA) protections. KBFC is primarily focused on development and use of a common database that will broadly enable data sharing and, by extension, inform fisheries management and ecosystem restoration in the Klamath Basin (Basin).

Several years of PIT tag research—led by multiple entities across the Basin—catalyzed the formation of KBFC and informed many of the goals and strategies now driving collaboration, data sharing and database development work. Key collaborators include Tribes, federal and state agencies, non-governmental organizations and the Pacific States Marine Fisheries Commission. Additional collaborators are anticipated in the near future.

Significant federal funding opportunities, well timed with the impending removal of four dams on the Klamath River, position KBFC to rapidly expand, scale up, and integrate work across what historically has sometimes been termed the "lower basin" and "upper basin" regions due to dams inhibiting fish passage. These operating guidelines describe KBFC's purpose, member commitments and organizational structure. Its contents are expected to evolve.

Members of the Collaborative are listed in appendix I. The KBFC Data Sharing Agreement is included as appendix II.

2. Definitions

Bipartisan Infrastructure Law means the Infrastructure Investment and Jobs Act of 2021.

ESA means the Endangered Species Act.

Inflation Reduction Act means the Inflation Reduction Act of 2022.

Klamath Basin or Basin means the overall geography of the Klamath River watershed.

PIT means passive integrated transponder.

<u>Member or membership</u> means individuals—and by extension the Tribe, organization or agency that each is employed by—who adopt and adhere to the data sharing agreement and the purpose, commitments and organizational structure of these operating guidelines.

<u>KBFC or Collaborative</u> means the Klamath Basin Fisheries Collaborative, an affiliation of invested entities and individuals described in these operating guidelines who collaborate to advance fisheries research and associated database development in the Klamath Basin. The Collaborative's current leadership team is supported, in part, by a United States Fish and Wildlife Service Bipartisan Infrastructure Law grant.

<u>Representative</u> means a member of the Collaborative serving on the leadership team.

<u>USFWS</u> means the United States Fish and Wildlife Service.

<u>USGS</u> means the United States Geological Survey.

3. Purpose

KBFC supports the recovery of native fish and the advancement of needed ecosystem restoration across the Klamath Basin. A central task driving KBFC is the collaborative effort to build and sustain a database which facilitates access to shared, standardized data that is critical to assess the effects of water management, fisheries management, ecosystem restoration actions, and impending dam removal on multiple fish species in the Klamath Basin.

KBFC members engage along several strategic lines of action to advance the Collaborative's goals, scale up, and integrate work across the region.

3.1 Build and Manage a Functioning Database

- Achieve a common understanding of the purpose and function of the database to guide its development and that of associated tools

- Build a standardized and structured database—accessible to all authorized data providers and their respective organizations—which supports access to a greater depth of information at multiple temporal and spatial scales

- Foster ease of use by supporting web-based and RestFul API data exchange, web-based query tools, and facilitating data submittal from electronic capture applications

- Make data accessible to authorized monitoring, management, and research entities and individuals, and support the human capacity needed to ensure widespread access

- Agree on what data is accessible by who, including how to address data requests from outside KBFC membership

- Manage the database in a trusted, respectful and highly controlled way that ensures the confidence of all members

- Build a database management system that captures necessary metadata to enable proper use of such data over the long-term

3.2 Strengthen the Network of the Collaborators

- Foster information sharing and coordination among data collection entities working across the Basin—Tribes, non-governmental organizations, federal and state agencies, the Pacific States Marine Fisheries Commission and academic institutions

- Ensure all members understand and adhere to standardized data protocols outlined in the data sharing agreement, and have the requisite training to do so

- Hold regular meetings (virtual and face-to-face) to enhance and improve collaborative engagement among members and interested parties

- Encourage and sustain participation in the Collaborative from a growing number of entities and individuals

3.3 Advance Research that Informs Fisheries Management and Restoration Actions

- Improve understanding of coho life history, fish survival and residency time—what fish do, where they go at certain times of year, how they survive

- Identify joint-learning opportunities from PIT tag work on multiple native fish species in the Basin

- Embrace emerging technology and build capacity to potentially monitor other fish in the Basin, including, as needed or appropriate, non-native species

- Generate a basis for comparability that supports adaptive management of restoration investments and secures the greatest benefit in the recovery of ESA listed species

- Find alignment, particularly as congruent with the actions and activities of the KBFC, with the Klamath Basin Integrated Fisheries Restoration and Monitoring Plan

3.4 Target Short-term and Long-term Funding Opportunities to Grow and Sustain Data Flow into the Collaborative Database

- Closely track and solicit annual funding opportunities linked to the Bipartisan Infrastructure Law, Inflation Reduction Act, and other sources

- Consider, and as need or opportunity arises, advance other potential monitoring modalities and uses of technology

- Build a database management system that generates and houses information over the long-term

- As needed, revisit the goals, structure and direction of the Collaborative to ensure clarity of purpose and broad participation

4. Guiding Principles

The KBFC's strategic lines of action serve as guiding principles that illuminate the path ahead. Members commit to:

- Build, manage and sustain a functioning database that is accessible by all authorized users, provides users with control over their own data, and supports access to data needed for management decisions and for addressing research questions

- Collaborate, strengthen and grow the network of contributors and supporters

- Advance individual and collective research that informs and will help assess fisheries management as well as guide ecosystem restoration decisions

- Plan for geographic expansion, embrace emerging technology, and consider additional species and monitoring methods as resources and opportunities arise

- Aggressively target short-term federal and other funding opportunities to build capacity, set the stage for growth and evolution of the Collaborative, and increase the likelihood of securing long-term, stable funding

5. Membership, Roles and Responsibilities, and Openness to Additional Collaborators

Approximately 30 to 50 invested entities and associated individuals currently support, participate in, or are in some way linked to PIT tag or other fisheries research in the Klamath Basin. It is understood that different entities have different levels of participation or interest in the KBFC. Some will become members. Others will remain as interested parties or observers. Several of the most active members formed and serve on a leadership team which guides the Collaborative and fosters basin-wide communication and engagement.

Participation or interest in the KBFC generally occurs at three levels:

1. Leaders who continue to fundraise, shape and collaboratively drive the KBFC

2. Data contributors and data users

3. Interested parties and observers

5.1 Membership

Membership in the KBFC is voluntary and includes all individuals who adopt and adhere to the data sharing agreement and these operating guidelines. Members commit to these established protocols and welcome the inclusion of others as the Collaborative expands. Members represent, to the extent of their authority, the unit of the Tribe, organization or agency that each is employed at.

Members lend various types and levels of support for the Collaborative, including, among other things, fisheries research, database development and use of the information generated from this work to inform fisheries management and ecosystem restoration efforts.

Current membership includes staff from Tribes, federal and state agencies, non-governmental organizations and the Pacific States Marine Fisheries Commission. Though brought together through collaborative engagement, members respect and appreciate that each maintains autonomy and self-direction with its own research and monitoring programs.

Appendix I lists current members and their respective affiliations. Appendix II includes the KBFC Data Sharing Agreement.

5.2 Leadership team

The leadership team is the primary decision-making body which guides the Collaborative. Leaders secure resources for collaboration, conduct extensive field work, and continue to build the database, structurally and by supplying data. The current leadership team, supported in part by funding from a USFWS Bipartisan Infrastructure Law grant (see Appendix I).

The leadership team convenes at least four standing KBFC meetings a year in order to 1) foster communication among members, 2) discuss research findings, priorities and fundraising needs, and 3) guide collaboration as the work unfolds and evolves. This includes the KBFC annual meeting, which commonly brings together a larger set of interested parties.

Leadership team tasks will change over time, but initially include the following:

- Provide scientific, technical and collaborative leadership in support of PIT tag and potentially other fisheries research and monitoring within the Klamath Basin

- Set the framework or adaptability framework for the data standards, as well as the data standards themselves, and, when needed, update the data sharing agreement

- Review and approve new members, and ensure all members adhere to the Collaborative's purpose, commitments and organizational structure

- Make administrative and substantive decisions to help guide the Collaborative and ensure all members meet their respective commitments

- Identify and help resolve disputes around data protocols, member commitments, or other substantive issues challenging the collaborative nature of the work

- Select and provide oversight of the project coordinator, and ensure that she or he has the support needed to serve effectively

- Collaborate with the project coordinator, all BIL grant recipients, and others as needed to secure long-term funding for the database (e.g., proposal development, budget management, reporting)

- Maintain balanced leadership team composition and ensure all leaders actively participate and adhere to the procedures and rules described below in sub-sections 5.2.1 to 5.2.13.

- Foster internal communication among leaders and other members, as well as external communication with other partners, funders and interested parties

- Help form and provide oversight of technical or other ad hoc workgroups

- Plan and support the annual meeting and annual review process

The leadership team operates by the following procedures and rules.

5.2.1 Representation on the leadership team. Members voluntarily participate on the leadership team and self-select their representation. Each Tribe, organization or agency represented on the leadership team holds one seat (primary representative). To ensure continuity and broad participation, representatives may, but are not required to, have an alternate or alternates available to serve as needed (alternate representatives). The total current number of primary representative seats held constitutes the full leadership team.

5.2.2 Quorum requirement. A quorum must be present in person or virtually for the leadership team to hold a meeting and conduct its work. A simple majority of the current leadership team or, if current membership is an even number, 50% of representatives, plus one additional representative, constitutes a quorum.

5.2.3 Ad hoc meetings. Communication or ad hoc meetings with a smaller set of leaders may occur. These are not considered standing leadership team meetings. As needed, administrative decisions (defined below) may be made over email with a quorum of leaders. No substantive decisions (defined below) can be made at ad hoc meetings.

5.2.4 Agenda development and meeting facilitation. The project coordinator works with the leadership team to prepare and secure consent on meeting agendas, and then commonly facilitates each meeting. In the absence of a project coordinator, one or more leadership team representatives may volunteer to help plan agendas, then facilitate and document meetings.

5.2.5 *Meeting attendance.* Given the rapidly evolving nature of the project, and the amount of information to consider, it is essential that representatives actively participate in leadership team meetings. Active participation is defined as attending at least 75% of standing leadership team meetings in a calendar year. In addition, representatives commit to review materials in advance, come prepared for discussions, and follow-up on action items for which they agree to at meetings.

5.2.6 *Meeting summaries.* Following each standing meeting, the project coordinator, or one or more representatives, documents for the leadership team any decisions, action items and other outcomes in a brief meeting summary. As needed or appropriate, meeting summaries may be shared with all members of the Collaborative.

5.2.7 *Use of alternates.* Designated alternates must be identified to the project coordinator and full leadership team. Alternates serve the same role as representatives when representatives are absent. Representatives will keep alternates informed of leadership team activities on an ongoing basis. Representatives are encouraged to designate alternates during the annual review but may designate alternates outside this time period on an as needed basis.

5.2.8 *Term limits.* Representatives currently have no term limits, though some could be established. Representatives may continue to serve indefinitely on the leadership team with support from the Tribe, organization or agency for which they work.

5.2.9 *Adding representatives or adjusting leadership team composition.* Additional leadership team representatives may be added, or the overall composition of representatives adjusted, with the concurrence of the full leadership team using its decision-making procedures.

5.2.10 *Leadership team resignation.* Representatives may resign from the leadership team at their choosing. If this occurs, the representative, or the Tribe, organization or agency the representative works for, will provide resignation communication in writing or email to the project coordinator and full leadership team.

5.2.11 *Leadership team removal.* Representatives may be removed from the leadership team for not adhering to the data sharing agreement and/or the tenets of these operating guidelines, or by not actively participating in leadership team meetings. Any individual facing removal will be given a chance to take corrective measures prior to any loss of representation on the leadership team. The full leadership team uses its decision-making procedures to determine leadership team removal.

5.2.12 *Project coordinator selection, removal or resignation.* The full leadership team selects and maintains oversight of the project coordinator. The project coordinator may be removed by the leadership team for not fulfilling her or his roles and responsibilities, or, if also a member of the Collaborative, not adhering to the data sharing agreement and/or tenets of these operating guidelines.

>***5.2.13 Member participation at leadership team meetings.*** Leadership team meetings are open to all KBFC members. Attending members who are not representatives on the leadership team may comment on any agenda item after leadership has completed its discussion on said item. Leaders may invite members to participate in any discussion topic or include agenda items which open group discussion to all members. Members may comment on previous decisions which have been made by the leadership team, or pending decisions, particularly if there are questions or concerns surrounding those decisions.

5.3 Project coordinator

The project coordinator helps organize members and sustain momentum. The project coordinator commonly hails from within the leadership team, though this is not required. This position serves at the direction of the leadership team and does not make substantive or unilateral decisions for the Collaborative. Primary tasks include, but are not limited to the following:

- Encourage and promote data sharing

- Track tasks and deliverables

- Identify issues and bring them to the leadership team for discussion and decision

- Reach out and solicit input from critical collaborators

- Schedule meetings, develop agendas for leadership team approval, lead meetings

- Track funding opportunities and work with collaborators to submit applications

- Send periodic updates to a larger set of interested parties

- Attend meetings and conferences and promote the value of the project

- Maintain awareness of socio-political challenges and work diplomatically to bring parties together to discuss and deliberate relevant issues

- Capture member updates when needed, and circulate the project's goals, organizational structure and data sharing agreement to new members

- Lend support, as needed or desired, to technical or ad hoc workgroups

- Update, when needed or appropriate, the KBFC website

5.4 Data contributors

Data contributors include KBFC members who exchange data on PIT tags, other tags, and related data to the database manager, either directly or with the assistance of USGS or PSMFC

data management staff. As members, data contributors adhere to the data sharing agreement and these operating guidelines. At times, data contributors communicate and coordinate with other members, as well as the leadership team.

5.5 Data users

Data users include leaders and other KBFC members who use data to support analysis and interpretation of fisheries research. Data users may not always be members of the Collaborative. Non-member researchers (individuals or entities) must request access to data from the producer of said data. All data users, regardless of membership status, must adhere to the data sharing agreement.

5.6 Interested parties and observers

Interested parties and observers include a range of individuals and entities interested in the Collaborative who may, at times, interact with members. This group generally does not contribute to the database, but may query any publicly available data, show interest in KBFC activities or outcomes, or offer funding or other support.

6. Decision-making Procedures

6.1 Types of decisions

The leadership team will make two types of decisions:

- Administrative decisions are about day-to-day activities, including but not limited to logistics, meeting dates and times, agenda revisions, schedules, etc.

- Substantive decisions concern financial and project-oriented issues, including but not limited to grants, goals of the Collaborative, data sharing protocols and agreements, changes to these operating guidelines, or removal of leadership team representatives, the project coordinator or other members, etc.

6.2 Consensus decision-making

The leadership team will strive for consensus in all of its decision-making, but is not bound by consensus to make decisions. Moreover, the leadership team commits to understand, consider and incorporate the views of all members in the decision-making process.

Consensus means all leadership team representatives present at a meeting with a quorum either fully support or can live with a decision. In reaching consensus, some may strongly endorse a particular proposal or recommendation while others may simply accept it as "workable." Others may only be able to "live with it" as less than desired but still acceptable. Still others may choose to "stand aside" by verbally noting disagreement, yet allowing the group to reach consensus without them, or by abstaining altogether. Any of these actions constitutes consensus.

The project coordinator or any leader may use straw polls to assess the degree of preliminary support for an idea or proposal before it is given consideration as a final leadership team decision. This may occur when moving from agreements in principle to agreements in detail, or when a consensus agreement appears near or is otherwise emerging. Representatives may indicate tentative approval during straw polls without fully committing support for a final decision or recommendation.

Less than consensus decision-making shall not be undertaken lightly. Moreover, some substantive decisions—as noted above in sub-sections 5.2.9 (leadership team composition), 5.2.11 (leadership team removal), 5.2.12 (project coordinator selection or removal) and below in section 7 (membership status)—require input from all current leadership team representatives, not merely a quorum. At times, it may be desirable for all members to weigh in on a decision.

In the absence of consensus on any particular issue or challenge before the leadership team, representatives may set aside or continue working on the challenge while the data sharing agreement and operating guidelines continue to guide group collaboration. After thoroughly discussing and deliberating relevant issues from all representative perspectives, and not reaching consensus, leaders have the option to motion for and conduct back-up voting (described below) to make a decision.

In general, consensus decision-making should occur at standing KBFC meetings, particularly for substantive decisions. Though not ideal or encouraged, substantive decisions using the procedures described above can be made on an as needed basis via email communication.

6.3 Back-up voting

In the absence of consensus, leadership team representatives present at a meeting with a quorum may, but are not required to, move to back-up voting to make decisions. Leaders may also defer substantive decisions to a later meeting if input is desired from more than a quorum of leaders, or from the broader base of all KBFC members.

One motion to vote by a representative, followed by a second, triggers back-up voting. For administrative decisions, the vote will pass if 50% or greater of representatives in attendance vote for it. For substantive decisions, the motion will pass if 75% or greater of representatives in attendance vote for it.

6.4 Decision outcomes

The project coordinator will work with the leadership team to document all decision outcomes, both verbally at meetings and in meeting summaries.

7. Membership Status

Any research entity or individual may become a KBFC member by providing the project coordinator, in writing or email, a commitment to adhere to the data sharing agreement and tenets of these operating guidelines, and then, affirming this commitment at a standing leadership

team meeting. The project coordinator will present prospective new members for consideration and approval by the leadership team, preferably at one of its standing meetings or the annual meeting, but over email as needed. The leadership team will use its decision-making procedures to affirm any new membership. As new members are welcomed, the project coordinator will revise the date and appendix I of these operating guidelines, then recirculate to all members.

Any entity or individual, including the project coordinator, may have their membership revoked for a violation of data sharing or use protocols. All members commit to report any possible or observed violation to the project coordinator and leadership team. Potential violators may be given a chance to take corrective measures prior to any loss of membership. The full leadership team (all current representatives) decides on the revocation of membership. Any leader may abstain from a vote on revocation due to a perceived conflict or other reason.

8. Annual Review Process

The leadership team will, as needed, conduct an annual review of the KBFC's purpose, commitments and organizational structure. During this review, leaders will, to the highest degree possible, solicit input from all members of the Collaborative. Leaders strive for consensus on any updates to the Collaborative's goals, data sharing protocols or agreements. In the absence of consensus on any particular issue, the leadership team may set aside or continue working on the issue while the data sharing agreement and these operating guidelines continue to guide group collaboration.

9. Use of Technical Workgroups and Community of Practice Models

The KBFC will form technical workgroups or use community of practice models to support planning, communication and common understanding of work taking place across the Basin. Workgroups develop advice, proposals or recommendations for consideration by the leadership team and, at times, other interested parties. No final advice, recommendations or decisions will be made by any workgroup. Rather, workgroups regularly report back to the leadership team.

Workgroups or community of practice models will generally be composed of KBFC members. However, in order to ensure participation of individuals with needed technical or other expertise, membership in the Collaborative is not required to participate. Four workgroups are poised to emerge:

- Governance – collaboration protocols as work grows in scope, scale and spatial coverage

- Science – combine individual and collective efforts to inform research, data collection and analysis

- Data consumers, data contributors and data managers – guide the data specifications, query tools, and other database functionalities to support data contributors and consumers

- Technical – equipment installation, use, tuning of arrays, tips and tricks

10. Revision of Purpose and Organizational Structure

The KBFC is an evolving initiative. Leaders and other members may revise the group's operating guidelines as needed or desired.

Appendix I. Membership

Leadership team

- Yurok Tribe
- Karuk Tribe
- The Klamath Tribes
- United States Geological Survey
- Scott River Watershed Council
- Pacific States Marine Fisheries Commission
- Oregon Department of Fish and Wildlife
- California Department of Fish and Wildlife

Individual leadership members and alternates (in alphabetical order)

Name	Affiliation
Sarah Beesley (leadership team alternate)	Yurok Tribe
Erin Benham (leadership team alternate)	Pacific States Marine Fisheries Commission
Summer Burdick	United States Geological Survey
Alex Corum (leadership team alternate)	Karuk Tribe
Jimmy Faukner (leadership team alternate)	Yurok Tribe
Charnna Gilmore (leadership team alternate)	Scott River Watershed Council
Alta Harris	The Klamath Tribes
Mark Hereford	Oregon Department of Fish and Wildlife
Jacob Krause (leadership team alternate)	United States Geological Survey
Nancy Leonard	Pacific States Marine Fisheries Commission
Harrison Morrow (leadership team alternate)	Scott River Watershed Council
Oshun Orourke	Yurok Tribe
Benji Ramirez (leadership team alternate)	Oregon Department of Fish and Wildlife
Crystal Robinson (leadership team alternate)	California Department of Fish and Wildlife
Rosemary Romero	California Department of Fish and Wildlife
Toz Soto	Karuk Tribe
Betsy Stapleton	Scott River Watershed Council

Appendix II. KBFC Data Sharing Agreement (revised draft 13 June 2023)

Need

The centralized Klamath Basin Fisheries Collaborative (KBFC) Database, maintained by the Pacific States Marine Fisheries Commission (PSMFC), is initially being developed as a repository of PIT tag, with the expectation that other tags identified by the KBFC will be added over time such as acoustic and radio tags. Tags included in this database are used to collect data on Klamath Basin anadromous fish, resident fish, and other aquatic organisms, with a focus on salmonids and suckers . Data in the KBFC Database cover years beginning in 2006 to the present time, although previous years can be included if the data and metadata quality is satisfactory. These data originate from monitoring and research activities being carried out by various entities in the basin, including Indian tribes, state agencies, federal agencies, university departments and graduate students, and independent watershed councils. All of these entities desire to access the database to obtain information in support of their research and watershed management activities, including those related to fish and fisheries management and habitat restoration. All these entities also support discovery of tags by providing a restricted level of public access to allow entities from outside the KBFC to be able to look up a tag number and the Data Originator, The Data Originator includes the entities who tagged the organism, detected the tag, and collected biological and physical data associated with the tagged organism. A need exists for a common understanding among the various entities regarding accessing these data, its use, and permissions and authorities in its use and dissemination.

Purpose

The purpose of this statement is to provide a common, agreed-upon understanding on data sharing among the parties related to data stored in the KBFC Database. The parties desire to share data among the cooperators to the centralized database with the goals of improving the health and performance of the various Klamath Basin fish populations, promoting scientific inquiry and understanding about the fish populations, and encouraging collaboration among the parties in these activities. Understanding the importance of facilitating tag discovery, the parties also support a restricted public access that would allow non-KBFC parties to look up tag numbers and the Data Originator.

This statement is intended to help facilitate such cooperation, while recognizing that such cooperation needs to remain consistent with the separate policies and management procedures of each of the cooperating parties. An example of such policies is seen in the unique government to government relationships that the Tribes have with both the federal government and state governments, as reflected in the current USFWS policy toward Indian tribes (https://pame.is/mema/MEMAdatabase/380_FWSPolicy-revised-2016.pdf).

Importance of Professional Courtesies
Recognition of a potential desire by the Data Originator, to publish:

If a KBFC Database user (data contributor, data user, member) is interested in using data from the KBFC Database belonging to other Data Originator(s) to conduct an analysis leading to

the publication of a report or journal manuscript, the Data Originator will be invited to participate as a full collaborator and co-author on project development and write-up to the extent they desire. The Data Originator may decline to provide the requested data if they can document any inappropriate intended uses or interpretations of these data by the requestor, or provide any notes, emails, files, etc. demonstrating realized or intended applications by the Data Originator that are similar to those proposed by the requestor.

Parties who are not part of the KBFC wanting to conduct an analysis leading to the publication of a report or journal manuscript must contact the Data Originator to access these data. If the content is publicly available, the party is expected to properly cite or communicate their intent to the KBFC in advance of publication to support proper use.

Openly Viewable to and Need to Request-View Data

[Note: need to define whether openly viewable means it is viewable by the public or some other level of access]

Open Viewing:

- Describe allowed usage for these open viewing including how to properly cite the content.

- Summary data—viewable graphs/figures

- Photos of the visuals can be downloaded, there are no associated data tables

- Maps—viewable and ways associated with downloadable data tables. The export feature of the data tables can be toggled on or off as desired by the leadership team. Maps include:

    o A sampling station map and table; not subject to data permissions restrictions

    o Quick access maps to contacts of interest to the logged in user (encounters of their agency's tags by other agencies, map of all contacts of tags in a particular release group) & data table; subject to data permissions restrictions

    o Tag lookup map and data table will display where the tag code had been detected by which entity and who is the Data Originator to facilitate collaboration. This information is not subject to data permissions restrictions, but a user must know the tag code in order to query it. The tag lookup function will allow searching for multiple tag codes at the same time.

    o Maps of effort-level queries and data table; not subject to data permissions restrictions

o   Remote time series graphs—viewable, no data table associated, but screenshot of graph can be downloaded; not subject to data permissions restrictions

User Permission Levels

[Note: these user-type permission levels will be defined to inform the different levels of permission to view and download content from the KBFC database. Suggest aiming for the least restrictive options that is acceptable and not overly complicating user permissions in anticipation of potential violation of professional courtesies. Start from a collaborative spirit]

Need Permission from Data Originator:

The Data Originator includes the entities who tagged the organism, detected the tag, and collected biological and physical data associated with the tagged organism.

- Data tables from the query forms—viewable and downloadable data table; subject to data permissions restrictions. The functions supported by the query (or queries) and their content is to be informed by the KBFC members, data contributors and data users.

- Effort-level metadata—viewable and downloadable data table; not subject to data permissions restrictions. This content may include accuracy of detections "read quality", maintenance of detection equipment, array operation monitoring and frequency, content to facilitate data discovery, information on data collection methods and protocols, analysis, and synthesis.

- Mapping on data displayed in query tables; subject to data permissions restrictions. Mapping may be at the reach level or to the precise location depending on Data Originator preference