Opening

Pam Larsen, River and Plateau Committee (RAP) chair, welcomed the committee and introductions were made. The committee adopted the August 2014 meeting summary.

Announcements

Susan Leckband, Hanford Advisory Board (HAB or Board) vice chair, reminded committee members that the HAB will celebrate its 20 year anniversary during the week of the November 2014 Board meeting. Susan encouraged those interested in supporting the event to get in touch with a member of the planning group.

Pam shared a video on Hanford emergency response procedures. Pam stated that the video, created following a U.S. Department of Energy (DOE) request to the RAP and Health, Safety, and Environmental Protection (HSEP) Committees, outlined the various hazards present at the Hanford Site, the current emergency plans, and the public actions that should be taken in the event of a Hanford emergency. Pam noted that the video had received a very positive response, and there are plans to share it during several upcoming speaking events and at local hotels.
Consortium for Risk Evaluation and Stakeholder Participation Hanford Site-wide Risk Review
Project Discussion

Introduction

Pam introduced the Consortium for Risk Evaluation and Stakeholder Participant (CRESP) Hanford Site-wide Risk Review Project discussion by noting that the project’s draft methodology had been presented at the September Board meeting, and that many Board members had expressed concerns relating to the strategy. Dale Engstrom, RAP vice chair, noted that many organizations involved in the Hanford cleanup had prepared comments in response to the draft methodology, and the committee hoped to hear some of these concerns and discuss potential next steps that the Board could take.

Committee Questions and Responses**

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

C. Because the CRESP Risk Review only looked at information that has been previously laid out in documents, the project will not be able to add much additional depth to the conversation of Hanford risk. The rating system that CRESP is assigning to risk may not robust enough to withstand side-by-side data comparisons. Additional issues presented by the draft methodology include: ignoring cumulative risk at the Hanford Site, not looking into risks posed by monitored natural attenuation, not looking into ground or vadose zone inventories, and not making an adequate distinction between risk and risk management.

C. One of the largest problems with the methodology is that it fails to recognize that contaminants left behind still pose a risk to human and environmental health. In defining “risk,” the CRESP methodology does not follow Comprehensive Environmental Response, Compensation, and Liability Act guidelines.

C. CRESP is attempting to look at risks that have already been categorized and then codify it in a way that measures future risk. This methodology is constrained and naïve, as the most difficult cleanup projects have yet to be started.

C. The comment period for the CRESP methodology has already ended. The tentative schedule for the report notes that the draft report should be released by late fall 2014 and that the final report will be released in spring 2015. By the time the Board is able to meet and release advice on this topic, CRESP will be well on their way to completing their methodology. The entire CRESP process appears to lack the expected level of stakeholder engagement, and the organization did not engage the Board enough.

C. CRESP came to the conclusion that caps (barriers placed over stored waste and designed to prevent or control the movement of water) will work as planned, and that these caps will serve as protection for buried waste for thousands of years. However, caps may not perform as expected. Rainfall at the Hanford

* Attachment 1: Transcribed Flipcharts
* Attachment 2: Oregon Department of Energy comments on CRESP draft methodology
Site is largely episodic, and, in cases of heavy precipitation, caps may become soaked-through and allow moisture to pass into waste stores. In this instance, CRESP’s conclusion is incorrect.

C. Due to problems with methodology, the CRESP study demonstrates a lower-than-actual risk for many areas around the site. There is concern that this report may be used to delay or excuse cleanup efforts.

C. The CRESP risk review presents the conclusion that there is no public health risk, as the public is not allowed access to parts of the Hanford Site. Much of the infrastructure barring access to the site is already faded or in need of repairs; the assumption that public access will be denied for thousands of years into the future is likely incorrect.

R. If you consider workers to be part of the public, there is risk for exposure through access, and, therefore, the potential for public risk.

R. The idea of releasing parts of the Hanford Site to public and corporate interests is one that is often discussed. Any future release would run counter to these assumptions that CRESP has made. There is not “no risk.”

Q. How much money has DOE set aside for the CRESP study? Can the committee submit an official request for this cost figure?

R.[DOE-RL] We will look into finding and sharing that figure with RAP.

Q. How should the Board move forward on this topic? Would advice or a letter be more appropriate?

R. The Board needs to release advice so that it is on the record noting disagreement with CRESP’s methodology and conclusions. We need a response from DOE and other Tri-Party Agreement agencies recognizing the concerns raised in today’s conversation. Advice can also be more easily cited in the future, which may make it more desirable than a letter.

R. This topic may not reach the level of advice. What is the policy issue that it would be addressing? Could it be connected to HAB priorities?

R. It is very important that the Board clearly state that the CRESP report should not be incorporated into any future cleanup decisions. This is why advice is more desirable than a letter—so that this consensus statement can be made on the record.

R. A letter could incorporate more information (e.g. the comments submitted by the Oregon Department of Energy, the Confederated Tribes of the Umatilla Indian Reservation, the Yakama Nation, etc.), whereas advice needs to boil all of the ideas down into a few main points. A letter from the Board may be stronger in this regard.

Issue managers (IMs) volunteered to draft a letter or advice for the November 2014 Board Meeting, noting that there were wide-spread concerns that much of the methodology ran counter to HAB principles. The committee also requested that DOE provide information pertaining to the study’s cost and funds allocated for CRESP’s risk review. IMs for the topic noted that they would collaborate via
conference calls and email to advance draft statements. They would share it with RAP in preparation for the November Board meeting.

**Deferred Maintenance Plan**

*Agency Presentation*

Kyle Rankin, DOE-Richland Operations (DOE-RL), provided background information on DOE-RL’s efforts concerning deferred maintenance at the Hanford Site. Kyle noted that, following recent occurrences at the Waste Isolation Pilot Plant (WIPP) in New Mexico, the Hanford Site conducted an extended site review with regards to maintenance. This process involved conversations between DOE and contractors, and it worked to identify needed updates to system infrastructure. Kyle reported that contractors self-reported whether or not they had sufficient resources, had all necessary equipment, had made necessary updates to ensure reliable, optimal systems, and had corrective action management plans in place for critical systems. Kyle stated that the results of this assessment demonstrated that critical systems at Hanford are operational, and that maintaining safe systems and infrastructure must remain a top priority for the Site.

*Committee Questions and Responses*

*Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.*

C. When the Board talks about deferred maintenance, we are not necessarily thinking of maintaining safe systems, but also maintaining buildings and other Hanford infrastructure. For example, a notice was put out recently recognizing potential issues with the roof at one of the plants. DOE stated that the reason for this structural issue was deferred maintenance. There are other issues, too, like leaking water lines, the Waste Encapsulation and Storage Facility’s (WESF) seismic vulnerabilities, etc. Repairing issues such as these would be very expensive. RAP would be interested in hearing more about deferred maintenance in this regard.

*R. [DOE-RL] In the coming months, we will specifically be looking at facilities like the Plutonium Uranium Extraction Plant (PUREX) and ensuring that they are in appropriate configuration. WESF and other utilities are going to be part of the maintenance review in the coming year. The most recent seismic analysis, once released, will need to be compared against these facilities to ensure that they are sound.*

C. It seems counterintuitive to spend millions of dollars on building maintenance, when these buildings are simply going to be torn down in the coming years.

Q. Has the maintenance mindset at Hanford evolved? Years ago, it was a case of priorities rather than money. A pre-emptive maintenance program was started to help the teams stay on top of things; however, maintenance actions were always more reactive than proactive. Are there any standard maintenance activities that are routinely deferred because infrastructure is not actively broken?

*Attachment 1: Transcribed flipcharts*
R. [DOE-RL] Two of the most common problems that Mission Support Alliance (MSA) reports are water line breaks and power pole breaks. When these breaks occur, maintenance actions occur. In this regard, ongoing maintenance efforts are reactive.

Q. Is there a specific budget for infrastructure maintenance, or is it funded by overhead?

R. [DOE-RL] Sharee Dickinson, DOE-RL, would be the more appropriate person to ask about budget.

Q. Why are the two deferred maintenance programs (Kyle’s program and Sharee’s program) not integrated? How are they related to one another?

R. [DOE-RL] There is one arm that is involved in oversight (includes nuclear safety specialists and engineers), and it deals with facility safety, non-nuclear reactor safety design, natural phenomenon hazards, and nuclear maintenance and management. The other maintenance arm, that which Sharee oversees, is involved in infrastructure.

R. RAP is concerned about deferred maintenance from an emergency response standpoint. The recent events at WIPP present a cautionary tale... roads need to be kept, fire hoses need to be functioning. The committee would like the opportunity to talk to Sharee about this important infrastructure maintenance.

Q. How do we know that facilities will be adequately transitioned as cleanup continues? Who is ensuring that everything is checked out to the extent that it needs to be as facilities are transferred?

R. [DOE-RL] That is the purpose of the ongoing safety process. The seven question process involves many specially trained individuals looking into facility and maintenance documentation.

C. When the Board considers an issue like deferred maintenance, we are interested in hearing about the overall site maintenance plan. We want to understand the systems and subsystems that exist for critical safety systems; however, we are also interested in systems that are not considered critical for safety, especially in light of current events at WIPP. The Board is interested in the maintenance procedures that are needed for safe, long-term operation of the Hanford Site. The information that was presented today is a piece of that, but the committee may need to continue this conversation with others in order to understand the full picture. RAP needs to look at the current system and identify any areas where greater integration is needed to ensure that nothing falls through the cracks.

R. Though DOE-RL is responsible for all maintenance efforts on site, it seems as though the systems is isolated into funding blocks. Operational continuity despite these blocks is what the committee would like to ensure.

R. In the future, it would be nice to see, systematically, who is in charge of what, and under what circumstances.

Q. How does overall deferred maintenance at the Hanford Site fit into the presentation that DOE-RL gave today?
R. [DOE-RL] The deferred maintenance plan works to address maintenance issues that may not arise in everyday operations. In other words, it addresses how DOE can better identify and manage a backlog of maintenance activities. The program is undergoing changes, but DOE has reengaged contractors to see how they are handling maintenance issues.

The committee thanked Kyle for the information. RAP tentatively noted that a follow up briefing on deferred maintenance should occur in April or May, 2015. The committee requested further information on operation continuity as it relates to the topic, and members noted that it would be helpful for both Kyle and Sharee to attend the next committee briefing. The committee also recognized that it would helpful to see a visual representation (an organizational chart or a process flow chart) of the deferred maintenance system to better understand how DOE is ensuring the long-term operations of both critical and non-critical safety systems.

**Environmental Restoration Disposal Facility Proposed Plan (joint w/ HSEP)**

*Introduction*

Richard Bloom, HSEP vice chair, introduced the Environmental Restoration Disposal Facility (ERDF) Proposed Plan topic to the committee, noting the importance of the topic to the HSEP committee membership. Richard noted that RAP visited the topic on several occasions throughout 2014, and he recognized that there had been some reluctance at the committee level to support EPA’s and DOE’s process of pursuing a waiver. However, Richard continued by stating that the issue is very important for continued worker safety at the Hanford Site. Advice in support of the waiver was prepared for committee discussion following a presentation by DOE-RL.

*Agency Presentation*

Bill Borlaug, Washington Closure Hanford (WCH), and Dave Einan, U.S. Environmental Protection Agency (EPA), provided the committee with an updated version of the briefing originally presented to RAP in February 2014. Bill and Dave noted that:

- Current EPA regulations stipulate that any macroencapsualization treatments done at ERDF must be done outside of the landfill itself, and then transported into the trench for disposal. The proposed waiver would allow this treatment to be applied to hazardous debris in-trench, providing an added level of protection to human and environmental health limiting the potential for worker and environmental exposure. The waiver would not change the way that waste will be treated, it will simply change the treatment location.

- The waiver would cover a very small amount of the waste that is disposed of at ERDF (0.16%). Only “large or complex” items requiring macroencapsualization would be managed in a different way. This waste may consist of such items as pipes from tank farms, large vaults, etc. This waste would not contain any liquids or organic vapors.

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* Attachment 3: CERCLA ARAR Waiver to Allow Treatment of Hazardous Debris within the ERDF Landfill (WCH Presentation)
• The waiver covers ERDF waste that does not fit cleanly into an ERDF roll-off container due to size or weight limitations. Bulk hazardous or containerized debris would not be covered under this waiver.

• For large, complex waste items, the current macroencapsualization procedure involves packaging the waste, and then coating it in polyurethane foam before an outer coating of polyurea is applied. This process is completed outside of ERDF; therefore, the encased item must be transferred into the trench for disposal. As items are often awkward or bulky, applying the spray coatings is time- and labor-intensive, and the waste must be repositioned at least five times (using a crane) as the polyurethane and the polyurea are applied. If there were ever an accident, workers could potentially be exposed to direct radiation, loose surface contamination, and airborne radioactivity.

• If the waiver were to be approved, large items entering ERDF would be immediately placed in-trench on a concrete pad. A soil berm would be built around the item, and the depression would be flooded with grout and left to cure for one week. This procedure entails less handling of hazardous debris and places fewer workers in close proximity to hazardous debris. In-trench macroencapsualization does not use foam.

• In-trench macroencapsualization is a much simpler process than current procedures. It is proven to be safe and efficient and it reduces disposal costs. It also eliminates the potential for encapsulated waste parcels cracking during transport, and it allows for better control during weather events.

• The current goal of the waiver process is to have a proposed plan, fact sheets, public notices, and an ROD amendment prepared between November 2014 and March 2015.

Regulator Perspective

Dave Einan, EPA, noted that conversations with EPA headquarters on this issue are ongoing. There are concerns within the organization that a waiver in this case may open the gates for other potentially responsible parties at other CERCLA sites to attempt the same; therefore, EPA headquarters would like any waiver to be site-specific and have well-defined sideboards. EPA has tentatively settled on the potential of supporting this waiver based on the Risk to Health and the Environment applicable or relevant and appropriate requirement (ARAR). Hopefully by the end of October, documents to support this waiver will be released for public review.

John Price, Washington Department of Ecology (Ecology), recognized that there are two ARARs that are being waived—one is federal, the other is state. The waiver would cover a definition in the regulation. All other ERDF waste disposal and handling requirements would apply. Ecology supports the action of reducing worker exposure, not the waiver itself.
Committee Questions and Responses*

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

Q. What does Ecology mean when they say that the agency supports the action of reducing worker exposure but not the waiver itself?

     R. [Ecology] Ecology does not disagree with the waiver, and the agency supports the action that the waiver would accomplish.

Q. Why can DOE not give RAP a better idea of what types of waste this waiver would cover?

     R. [WCH] DOE cannot be sure of the exact type of waste items that are going to come in, so we must base our assumptions on the wastes that have already been treated at ERDF. Anything that will fit into an ERDF container will be encapsulated inside of the container, therefore it will not be covered by a waiver. It is the larger, heavier pieces that would be covered by the waiver.

Q. What processes ensure that grout fully fills any void spaces during macroencapsualization?

     R. Access is provided during shipment that allows workers to access void spaces. A more flowable grout is used to accomplish void fills. Void fill requirements state that waste must be at least 90% filled.

Q. How do you ensure that no liquids are present in any of the voids?

     R. [EPA] The waiver would not impact exiting void-fill requirements. Anything that is greater than 10% void needs to be filled. This is true now with current procedures, and these regulations would remain in-place for in-trench treatment.

C. Debris from facilities like the Plutonium Finishing Plant (PFP) and PUREX will be coming to ERDF in the coming years. Workers need to be kept away from these items to the greatest extent possible.

C. There is frustration within RAP on this issue. The committee has been asked to produce advice on two occasions; however, there is concern that the Board would be supporting a waiver that we have not yet seen. RAP would like to see specificity, but the waiver needs to recognize a level of flexibility to account for unforeseen wastes coming to ERDF in the future. These issues are difficult to reconcile.

     C. [DOE-RL] RAP seems concerned with the risk of supporting something that has not been fully and completely analyzed by the committee. However, there is likely not much value in the HAB re-analyzing a waiver that will undergo all existing review processes. Agencies would appreciate advice on this issue that is policy-level, supporting the process and worker safety.

Q. Will this waiver change waste acceptance definitions at ERDF?

     R. [WCH] No.

* Attachment 4: Draft HAB Advice: ERDF ROD Amendment
Q. Will this type of in-trench treatment change the performance acceptance for ERDF?

R. [WCH] No.

Q. Does the process of in-trench macroencapsualization impact the ERDF liner?

R. [WCH] No.

Q. Would the waiver change how waste moving into ERDF is tracked and shipped?

R. [WCH] No. WCH manages most of the incoming waste, and established shipping controls would not be changed.

C. There is no structural boundary that is constructed during in-trench grouting. This is problematic from a retrieval perspective. Any waste that is disposed of in ERDF should be retrievable.

C. This advice is a very slippery slope. RAP wants to protect workers, but the committee cannot be expected to support a waiver that we have not seen the language of. There are fears that this waiver could open up ERDF to off-site materials. The committee should not support a ROD amendment that we have never seen.

R. [WCH] This waiver will not open ERDF to off-site materials.

C. It is important that the Board weigh in on this matter soon with advice. There is much support for this action, and protecting the health and safety of workers is of the utmost importance.

C. This advice should be crafted in such a way that the Board lends support to macroencapsulating in-trench, but does not discuss pathways to get there. Today’s draft advice includes calculations of exposure limits; however, this detail is likely not necessary.

C. The Board is not a regulating body. This advice should not be technical. We should only include policy-level language.

C. The advice should be limited to stating that the Board supports the idea of improving worker safety and reducing exposure.

The committee thanked DOE, EPA, and Ecology representatives and decided to move forward with advice for the November Board meeting. IMs for the topic noted that they would work in the coming weeks to draft advice that is non-technical and that supports worker safety and the general principles of in-trench treatment.
**Continuing Resolution and Budget**

*Agency Presentation*

Mark Coronado, DOE-RL, provided RAP members with a brief overview of the federal budget process with attention paid to impacts on the Hanford cleanup. Mark noted the following points in his presentation:

- At any given time, the federal government is working on three years of budget: an execution year (currently FY 2015), a budget year (FY 2016), and a planning year (FY 2017). DOE will likely submit a budget proposal for FY 2017 in April 2015.

- In recent years, Congress has been unable to follow regular budget procedures because of a variety of factors. If Congress is unable to pass a budget by October 1 (the beginning of the fiscal year [FY]), then the federal budget has lapsed. The Hanford Site has a measure of carry-over during these situations.

- Currently, the federal government is operating under a continued resolution (CR) until December 11. This CR is the same rate as 2014, less 0.0554%.

- The CR provides enough funds for full operations at Hanford for a limited amount of time. However, if the CR continues to operate long-term, it may present some challenges, including restrictions on new starts, tightening funds on existing projects, and an inability to accurately plan or execute work for the coming year. DOE-RL is hopeful that congress will come forward with final appropriation soon; however, this may be determined by election outcomes.

Mark closed his presentation by noting that DOE-RL would like the HAB to consider cleanup priorities at Hanford. As budgets become more constrained, this feedback would be very helpful as DOE works to adapt.

*Committee Questions and Responses*

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

Q. What “new starts” at Hanford are being impacted at this moment by the CR? Are the sludge items affected?

R. [DOE-RL] The sludge is already being managed. There was a change in how DOE approaches the sludge projects from a fiscal standpoint, and we received guidance that sludge work could continue. However, the Low-Activity Waste Pretreatment System has been impacted by the CR.

Q. In light of the CR, DOE has obviously had to decide what work to pare back. Can the HAB expect an update at the November Board meeting noting which projects have been downsized?

*Attachment 5: Overview of the Budget Process and How it Applies to Hanford (DOE-RL Presentation)*
R. [DOE-RL] DOE currently has a very high carry-over, and we are currently proceeding as planned at the President’s budget level. We are hopeful that there will not be any significant impacts or work stoppages.

Q. Will DOE-RL next talk to the public in March, regarding the FY 2017 budget?

R. [DOE-RL] We will hopefully discuss the President’s budget before that.

C. As we move forward with the WTP and the tanks program, and as DOE decides that they need other buildings to support the process, the Board needs to be updated. These changed impact the budget, but, more importantly, they impact the WTP’s schedule.

The committee thanked Mark for the informative presentation, and they requested that he return with additional updates if the continuing resolution endures past December 11.

Committee Business*

FY 2015 Work Plan Review*

Pam began the discussion on the FY 2015 Work Plan by noting that the document was still in an interim state, and she stated that the purpose of RAP’s discussion was to provide feedback for Board and agency leadership as they work to finalize the scope of Board work for FY 2015. Many agency-identified topics were not ready to be discussed at committee meetings and committee members stated their desire for clarity and more support from DOE in the coming months. DOE noted that there was the potential for several additional topics to be visited by the committee in December 2014.

The committee discussed potential updates to the FY2015 Work Plan, noting that:

- Discussing K-Reactor bore holes in spring 2015, postponing updates and discussion on demolition efforts at the PFP, and discussing 324 Building and the vadose zone plume in early 2015
- Potentially elevating topics currently existing in the “holding bin”
- Coding topics based on their timeliness or immediacy
- Adding additional topics to the binned items (300 Area ROD, 618-10/618-11, missed TPA milestones, etc.)

The committee reiterated the importance of hearing periodic updates on the implementation of many work plan items. Members stated that this information in highly useful from a policy perspective.

DOE-RL noted that they are discussing HAB FY 2015 Work Plan additions with senior leadership, and that further updates to the Work Plan may occur during the November Executive Issues Committee (EIC)

* Attachment 1: Transcribed flipcharts
* Attachment 6: Hanford Advisory Board Fiscal Year 2015 Interim Work Plan
meeting. Agency representatives thanked the committee for their patience as new collaborative strategies for HAB Work Plan development are established, stating that agencies have pledged additional assistance for identified topics as well as quarterly Work Plan check-ins. Still, many RAP members requested more robust support in coming months, especially regarding committee meeting planning.

Pam stated that she and Dale would take RAP’s FY 2015 Work Plan updates to the November EIC meeting for discussion.

_Update 3-Month Work Plan*

The committee updated its 3-Month Work Plan and requested a meeting in November that will include the following topics:

- DOE-RL update and committee discussion on Central Plateau Inner Area Principles, following the topic’s presentation at the November Board Meeting. Through their discussions, RAP will work to identify further areas for discussion and advice relating to integration efforts, cleanup scope, and cleanup schedule.

- A debrief on the F-Area ROD that will update committee members on recent actions. EPA requested that committee members read the responsiveness summary in preparation for the presentation and discussion.

- A site visit of the central plateau area, potentially incorporating a stop at the Maintenance and Storage Facility. DOE will look into the possibility of a tour and logistics.

For December 2014, RAP identified the Area Management Plan as a potential topic for discussion.

* Attachment 7: River and Plateau Committee 3-Month Work Plan
Attachments

Attachment 1: Transcribed Flipcharts

Attachment 2: Oregon Department of Energy comments on CRESP draft methodology

Attachment 3: CERCLA ARAR Waiver to Allow Treatment of Hazardous Debris within the ERDF Landfill (WCH Presentation)

Attachment 4: Draft HAB Advice: ERDF ROD Amendment

Attachment 5: Overview of the Budget Process and How it Applies to Hanford (DOE-RL Presentation)

Attachment 6: Hanford Advisory Board Fiscal Year 2015 Interim Work Plan

Attachment 7: River and Plateau Committee 3-Month Work Plan
### Attendees

Board members and alternates:

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<td>Shelley Cimon</td>
<td>Pam Larsen</td>
<td>Richard Smith (phone)</td>
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<td>Dale Engstrom</td>
<td>Susan Leckband</td>
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<td>Barbara Harper</td>
<td>Maynard Plahuta</td>
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<td>Rebecca Holland</td>
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Others:

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<td>Cathy Louie, DOE-RL</td>
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<td>Kris Skopek, DOE-RL</td>
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<td>Ginger Wineman, Ecology</td>
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