***This is the transcript that pairs with the recording of the “IDSP Annual Report Overview” presentation by IDA Director of Conservation Ashley Wilson on July 27, 2022. Timestamps are provided throughout that show when a new section begins. Sections are bookmarked in the Table of Contents. Untranscribable or unnecessary audio are marked by a /…/. Words that are implied or missing are now entered within a double bracket [X]. Additional notes from IDA staff are denoted with italics.***

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[00:01:44] Beginning of Presentation

As you all know my name is Ashley Wilson, I'm the director of conservation and lead of the international dark-sky places program and we also have Amber Harrison who is our program associate and Amber is going to be your primary contact when you submit the form at the end of the year. So if she's on and she has her video open... Don't see her yet might be a second...but as we go through the presentation, if you have questions, please enter them in the chat. Amber will be collecting your questions and then we'll answer them all. And then after I go through everything you can also raise your hand if you want to ask a question verbally as well.

So I scheduled us for 90 minutes. I don't think it'll go the full 90 minutes but I just overextended because all of my meetings go long and it's never a bad idea to be safe rather than sorry. /.../

This will be very informal as I have the form open on my screen and I have an example I'm going to go through. So you'll get an idea of what the form looks like, how it functions, give you an idea of the questions that we're asking, and what are the different responses that we’re looking for. Then after I go through the form, we also are updating our hand held SQM protocol, which is the basis that the majority of people use to monitor night sky quality. There's a little bit of a change in how we are doing that. It is mostly meant to standardize it. /../ We are planning on officially publishing that in the next week or so, so I will send that out in a separate email so you all have it, but I'll go over it today in detail.

[00:03:39] Form Introduction and Directions

And this is recorded so I will share the recording with you all as well, so once we are done if you have other people on your team that weren't able to come today you can share the recording with them and everything that we go over will be in one place.

Okay so we're going to give you a link and this is what the form is going to look like. It is a Jotform link and there's different pages that we will go through. I also sent out this form earlier this year and I will send it again. It's on our website but all the questions in the form are also in this document, so I highly suggest downloading and making use of this document.

You can put all your answers and put all of your planning here and then you can just simply copy and paste them in the form. If you want there's also a save function on the bottom so if you're in the middle of entering things in the form, and if you have to leave or you have to come back you can save all your progress and it'll send you a link to your email and then you can click on that email and keep going so you don't have to start from scratch. I do recommend putting all of your answers together and when you decide to submit the form, do it all at once. I had some difficulties or sometimes it kicks me out for some reason, like when I was going to upload something, so again this is just another reason why it's really nice to have this document to the side.

Another thing too about this particular document is all possible questions are going to be in here whereas when you're doing the form, when you submit which category are applying under, it's only going to show you the relevant questions. So when you're doing this document just make sure that if you see a question that's underlined (if you're like a park or a reserve) make sure that you're answering those questions as well as all the ones with this red asterisk. This [means] these are all required and you cannot submit the form unless you answer at least all of the required questions.

And then we also have instructions here and it's also in the form for how to name all of your uploads. We have the schematic where we have "Place name" underscore "category" underscore and then your "description" with no spaces. We have five different categories here based on the different fields of when we asked for an upload, and then “description” is just one to three words. We provided some examples, so here we have "Exmoor" underscore "Sky quality" underscore "data sheets", and then this is the document type; Same thing we have "education brochure" or "lighting" and then here's the photo description.

So I'll point this out when I go through my example but what's really nice about the form as well as not only will the uploads be in the form but we can also download them individually. That'll be really nice because we're going to make a really big investment in updating all of your place specific pages on our website. We want them to be more interesting and more engaging and we want visitors on our website to be excited to come to your places. So the stuff that you put in your report we want to showcase on our website. We want to show all the amazing things that you do and show that there is this incredible experience at all the places, so how can we get information from our reports, put them on the website [and] that having individual files will allow us to do that.

Another thing that I noticed with this Jotform is you cannot save hyperlinks like we would in a Word document, so if you plan on referencing any websites just make sure that you paste the full URL into the form box and then I can just copy it and open it in a different tab. I think that is all the housekeeping.

The last thing that I will say some of you might be wondering if I put all of my answers in this document can I just sent the documents to you and the answer is no. And there's a couple reasons for that. With this form, it will allow us to collate all of the answers from all of the 180 reports that we are expecting this year. So if I want to take a quick assessment at quantitative data like how many of you are using our FSA products, /.../ how do I track change in average night sky quality, stuff like that. Like I can't assess that kind of data like looking at 180 different PDFs. So this form allows me to look at a lot of information pretty quickly, it's standardized. There's also a PDF that it'll produce at the end, so once you submit all your answers you can immediately download the PDF and share for your own records, and that PDF is what we're going to use on our website in your annual reports folder. That's how the report will be saved and then each year you'll have a different PDF for each for each form that you'll submit.

[00:09:12] General Place Information

Okay, so that's all the general stuff.

So my example that I'm going to share is going to be Voyageurs National Park and I picked on them because I did my internship with them a couple years ago helping them write their Dark Sky Park application. So I thought it would be fun to showcase their annual report. So sorry for picking on you guys but I just wanted to show how the form works. I prepared my answers based on their 2021 annual report.

So as you go through and click on a box it will highlight to show what you're entering, and you just type it in. You'll see things here like drop down menus... And then here are you can clearly see all the required questions. So like the ones with your name, you're going to have to answer every single field here for you to submit this page. For this last box [it’s] your title or how you're associated with the site.

 If your name is the same as "primary contact" you'll just enter the same information twice. But for me I'm pretending I'm representing Voyageurs so I just put my information here and I put the primary contact here. We have this optional box for a secondary contact and some places like to have multiple contacts for us to reach out to, so this is where you would update that.. and if you have another manager name...

Here we would like you to enter if you have a management Agency; for example this would be National Park Service. If you're a private place who manages the site or if you're a community and that really doesn't make sense, you don't have to put that in if that doesn't work for you.

And then we also have if you're [under] a provisional status, which is really only a handful of you, and then a question if you are an IDA Delegate, Affiliate or Chapter representative. Note that if this does apply to you that this form is separate from the annual Advocate report that you'll send to Bettymaya. But this just gives us an indication that we can send this report to Bettymaya so she can look at both forms, but your answers in both forms are going to be separate.

[00:11:28] Night Sky Monitoring

The next page is Night Sky Quality and we have a little summary at the top of each page to remind you which subject you are currently working on so you can organize all of your information at once.

This is red because it's showing me that it's required and I haven't entered it yet so this is just what this looks like in case I started it but I didn't finish it. In my notes I have their average night sky quality reading reported in the original application that they submitted to IDA - so that was 21.47 magnitudes per square arcsecond.

If you were certified under a tier (gold, silver, or bronze) please mention that here. We discontinued that with the 2018 guidelines so if you do not have a tier, just leave that blank.

And then you're going to provide your total average SQM reading for this entire reporting period, which again is from October 2021 through December 2022. The information from Voyageurs’ annual report last year was 21.45.

Here we are going to ask that you update your spreadsheet. Not only do we want your average experience of what your visitors are having but we also want to see your raw data. Your raw data is going to give us an inference on if there is natural variation in skyglow throughout the year, if there is increasing light pollution from a nearby community, for example, or development or something, so it gives us more of a holistic idea of how this resource is changing over time. Here, I want to click on this file and I'm following that same naming schematic [so place name, here's the category, here is the data] and you'll see that it is already loaded so now it's in the file [form] and saved.

 We also have two links that you can click on and I'm going to quickly go over them now, but I'll come back to this later. First, we have the instructions and our measurement protocol. I'm going to go into more detail at the end, but it has everything from explaining how to use the sky quality meter, when and where to take measurements, how to design a survey - here's an example - and then we also have our new standardized spreadsheet for submitting your data. We recognize that because more than half the year 2022 is over and if you've already done your measurements or haven't planned on changing it that's fine. If you are able to make adjustments for the rest of the year that would be great, but 2023 moving forward we're going to ask that you adopt this new protocol. I'll go over that later in a little bit, but here is an example of what that standardized spreadsheet is going to look like. You can enter all your data in one place and upload it here.

And then the other thing that we're going to ask is a map where you can either upload a PDF or an image that shows the locations and names of the places where you are taking your measurements. So again we also want you to be standardized not only in how and when you take your measurements but where [as] you are monitoring the same place over and over and throughout the year. [example] Again I have a PNG file of the Park's boundaries and then ideally you would have little markers and the names would pop up that correspond with the names in your spreadsheet.

Then this last question we are asking you just to describe any detectable changes and the experience of night skies. This is where we're trying to get at with a more qualitative approach. And so not only do we have the Zenith night sky brightness values from the SQM device but also can we look at light domes on the Horizon. So having again that more holistic all-sky view and trying to compare the quantitative with the qualitative. For those of you that have been recently certified you might not have any information but those of you that have been certified for 5 to 10 years maybe you have seen a trend for better or for worse. And if you have or if you are watching any light domes on the distance to make sure that it doesn't interfere with your night sky quality, those are all things that you can describe here. Again, note that this is not a required question. /../ The more information that you can provide the better. But if you don't have it then we're not going to hold that.

[00:16:24] Lighting Compliance

The next section is lighting compliance and so this is where you're going to report not only your compliance rate for your respective place but then also any changes in private lighting, within or by your boundaries, and how you are helping encourage dark sky friendly lighting as part of your mission as a Dark Sky Place.

This is one of the examples where you will get a table based on your specific category, so if you're a Park, Sanctuary, or Community this is what your table is going to look like. A Reserve is going to have some same framework but [for] Reserves [we] are going to ask you report the compliance rates for the core and the periphery. And then for Urban Night Sky Places, the expectation is they are already a hundred percent compliant so they don't have a table, because that would just be redundant.

 For Voyageurs, the data I have is /.../ We're going to use Parks, right? [correct] They were certified in 2020 and their original compliance rate was 75%; their current compliance rate is 87%; and their anticipated percent for the next reporting period is still 87%. They currently describe that they don't have plans for the next year to invest in remaining lights that need to be retrofitted but they are still within that five and 10-year plan that they committed to in their application. This is exactly what we're looking for.

This box is another required box asking us, "okay if you changed in your compliance rate in the last year, can you describe what you did?" This would be photos; if you have your lighting inventory table that you used when you submitted your application, this would be a great place to re-upload that, which you can get in the next box. You can just highlight the new changes so we can see exactly what you did and make sure that they are following our five principles. Then this kind of just gives you more of a description - so we have a little footnote here reminding you the type of information that we're looking for. In Voyageurs’ example, I'll just copy this. They basically said they haven't received grant funding for the current year but they are making plans on updating it so that's fine. That's exactly what we're looking for if they didn't make any changes. The big thing as just communicating with IDA whenever possible. If they did make changes, I'd like to see some sort of documentation of it here, and so like I said that could be an inventory table, the specification sheet if you purchased it from a manufacturer, and then we always love photographs of before and after, especially if you did notice a decrease in light pollution and you're restoring natural darkness. That is the main point of a lighting retrofit so if you can document that [then] that's a really big win that we'd like to share on your behalf.

A new question that we are asking this year is, "Have you ever used fixtures from our fixtures seal of approval program?" and so we just want to see if there's integration between our two programs. Then if you have used our fixtures, what have you used; are certain fixtures locally available in certain Regions compared to others; are they doing what you thought they would based on the specifications that you ordered. So again [we're] just trying to get more information of how your actions are helping conserve Dark Skies. Voyageurs did not [use an FSA product]. And for this particular question if you used an FSA fixture for your application but maybe not this reporting period, you can add it here if you want just to give us that information because that's not a question we asked you before. It would be nice to have that on record.

Then this last question is completely optional but we recognize that with the Covid-19 pandemic, it's thrown a lot of wrenches in all of our plans and has made everything incredibly difficult. So in any event that you're Park or your community has originally committed to a 5-year plan to retrofitting your lights and now that you are realizing that maybe if you had staff turnover, maybe if you worked with your lighting or utility company and they don't have the chips in place to make these changes with the lights, or I don't know, there's a plethora of reasons that things could have gone wrong. This just gives you the opportunity to let us know if you don't feel you're going to make that proposed Milestone and then give us a description of what you plan to do moving forward. Like, "okay, like we have this setback but how are we going to get back on track?" So again we want to work with you. If you don't talk to us, I can't know what's going on. I can't make any assumptions. This just gives [you] an opportunity to have that open discussion with us.

That is this section. There's also this back button too so if you remember that you forgot something in a different section you can always go back and forth so it's like it's not set in stone once you click on to the next section.

[00:21:49] Outreach and Education

The original education section is definitely our longest section, but we also know that our Advocates love to talk about all the ways that they're engaging and inspiring people to look up in the night sky. We'll try to have as many questions as possible to help promote all the things that you do.

This is a big change in how we are reporting outreach events, so I'm going to go through an example to explain what we're looking for. This first table is going to summarize everything that you did in the first [past] year. So here is going to be total number of events; number of unique events offered; and total number of attendees for your events. This is different too; we're transitioning over from originally asking how many visitors you had at your place to now how many people are coming to your Outreach efforts specifically. I think that makes more sense, especially for reserves where people live and there's communities in it, and now we're focusing more on efforts and how promotion and engagement with dark-sky specific efforts are engaging with your audience; are they coming to your place for the programs that you're offering?; is there interest in maybe coming into that discussion leading into if you see it and increase the visitation because of your dark-sky certification in these additional venues that you're providing them.

I want to go through what I found with Voyageurs. In their 2021 report I counted a total of 49 events and I saw a total of 6 unique events. Here I have a note that *unique efforts* are different programs. So for example if your Park likes to host like two Ranger-led night sky talks a week during the summer. That's going to be one unique event but you are going to count each individual night talk in your total number events. Then from all the events you are going to provide the total number of attendees, so Voyageurs counted 827.

This box is going to allow you to describe the unique efforts, so each entry is going to be a unique different type of event. I'm going to copy and paste what I have here and go over this example. I had a question from an advocate, "What about formatting between the downloaded document in the form?" What's really nice is with the form is when you paste it it's all going to be the same format, so it's all going to be in the same font, the same size, so you don't have to worry about that.

[There are] instructions up here in this box and then we also have an example down below in case you want to follow it. So here we have "event name", so here are the event's name was "Night sky explorer". And then you're going to separate it with a semicolon. And then we have a “date or range of dates” of all events under that name. Voyageurs did 10 events between November 2020 and September 2021; semicolon; and then they have “number of attendees”, so they counted a total number of 279 attendees for these 10 events; and then we're going to get into a “brief description of the event and the *values* that you promoted”. And so that's really important because we want to know how you're connecting with your audience and there's so many different ways to get connected with the dark-sky movement. We want to know what's important to your visitors specifically and how you're getting them engaged with this conversation. We provided a list of examples here and you can kind of run off of it however you want; so like for this example they mention how they introduce individuals or families to astronomy but they don't just stop at astronomy. They also talked about light pollution, they talk about celestial events and other objects that happen within that specific event. Again you're tying astronomy with light pollution. It's not just look at the night sky but it's also coming back to that theme -- light pollution is degrading our view of the night sky and here is why it matters.

Then you're going to separate it with this break here, so that's what this means just a little Enter space, and then start with a new number and then repeat with the same process. So here's the "name". They had a little bit more description of what this event meant and they have four different types, so then they broke it down. Here is the "sub events name"; here's the dates; here is the number of People that attended, and then here's a brief description.

Here's an example of a kind of grouped event. They had two hour-long programs per week from June 18th to September 17th for a total of 23 programs; they had a total of 423 attendees; and then they talked about what their Ranger program went into. [Here] their values also [included] cultural importance and how people connect with the night sky. They have their star party; they mentioned Partners in their description. /..../ Our template tried to aim around a hundred words per entry so if you follow that that gives you the opportunity to enter 10 unique, different types of events. If you have more unique types, just kind of shorten the entries a little bit but hopefully this will be enough room for you to fully talk about all the different ways that you were engaging with your visitors.

If you want, there are these little lines on the corner so you can expand the box if it does get lengthy so you can see the answers in a little bit more detail. But again this is another nice reason why having that document to the side is helpful so you can just put it in here. You don't have to worry about editing or formatting it once you get into the form.

[00:28:20] Outreach (continued) - Promotions and Experiences

Another required question is “how did you promote the IDA during your programs?”, and that's something that has always been in our Guidelines so that one should not be new. And then I think for Voyageurs /.../ I think their example was just brochures at the visitor center. If it's that [or] if you have a presentation and you mentioned the IDA at the beginning of each presentation, mention our website, or something like that, but just making sure that people recognize that your site is certified through us and that, like, you have this relationship with IDA is really what we're looking for. People can make that connection.

An optional question is asking if you have any ongoing or planed events that blend the Arts or the culture with dark skies. What did Voyageurs do.... they actually had a pretty good answer here, so I just was going to copy and paste. And I also want to show that there is a 300 word limit. So if you pass the word limit this is what the error is going to look like. Now I know I need to take some stuff out. So in this I'm just going to take out a sentence that describes the background of the speaker. I'm still above 300, so I will take out the other sentence about the other speaker and now I'm in the word limit. That's all that is.

This is the box if you want to share anything about your visitors' experiences. So if people have left you any comments, if you have like feedback cards, or maybe if you do an evaluation of your events, if you happen to know if people are coming to your events more or less, this is just kind of, you know, a way to show how you're assessing that change in like whether or not your programs are doing what you intended them to do. So I am just going to put in a quote from one of the presenters at one of the events.

Then we ask that you provide up to five photos of the events, so that way like if you want to show your Rangers and your staff and your volunteers engaging with your visitors. If you can do like a really big star party every year to show off all the fun telescopes /.../ if you have a virtual presentation you can put in a screenshot of that here. So again I'm following the same schematic - place name; category is Outreach; here is the event - those are the star party and then they had the solar scope and this other pop up. And then once you see the size you know it's updated. You can always remove if you accidentally put in the wrong file, for example. Then if you want to have the photographer's name to the file name, like if someone took it for you, that would be the place to add it for permissions is in the file name so we have it on record. But if it's taken by the park and that's pretty clear that the park owns that photo or the place then we can just leave it with the naming schematic. But we don't want to take credit for a photo if that's not given to us, or the permission to share it.

This is another fun new thing that we're asking is for social media handles. So another thing that we want to put on your place-specific page on our website is links to all the social media handles, either for your own a site, if you have Partners like if you work with the local astronomy club, /../ if you have a "friends of" group or conservancy group that you work with, those are all things that we can put on there and provide further engagement with visitors that come to our website. If you put the links here that's something that we can go back and add to you your page after the report is submitted.

We're asking you here, "Have you participated in any IDA-led initiatives such as IDSW, our Under One Sky Conference, or anything else”. As a note I think over 40% of all of the events for dark sky week this year came from a dark sky place. So thank you for all of those who participated this year. It was a growth from the previous years, so thank you for doing that and giving people an opportunity to engage with the night sky during that week. If that was you, you would say "yes". If you have a link to your event or like a description of what you did, you would put that here.

 Some people also like to share their media coverage as well especially how the dark-sky movement is growing every single day. If you have actual file like if you downloaded it, you can upload it directly or you could make a separate document and just have hyperlinks to all the Articles and just upload just one single document sharing all the coverage that you got.

This is something I'm asking as well - we haven't been consistent with requesting photos of your erected sign saying which Dark Sky Place you are after certification, and we're going to have 180 reports this year, so I should have very nearly 180 photos. If you could update the latest photo of your sign, that is another thing that we can put on your place page [and] that would be a good resource to have. I do have this note here if you have prior permission from IDA to not erect a sign; let's say you were certified last year and you're still in the works of erecting the sign or we have a couple of reserves that don't have a sign just because of how big they are and it was not feasible to put a sign at every entrance to the reserve. You can just upload IDA's logo in place of the requested photo so you can bypass the requested question. I actually have a link to our logo in the questions document so you can have it. But for the most part just about all of you should be able to provide a photo at this point.

[00:35:05] Outreach (continued) – Materials and Interpretation

This is asking about how you were providing educational materials. /.../ This is what Voyageurs did./.../ If you want to talk about which brochures you are giving out, if you made your own, this would be really great place to Showcase that; if you worked with an IDA chapter or another group for providing materials; if you're providing materials at like at City Hall or like a tourism office, like all of that information would be perfect here.

Then we're also asking, this is the optional question, but if you have made a resource that you shared with your visitors, we would really like to see it and share it, especially if it's in the national language instead of just English. Why reinvent the wheel? And then 2: this is another thing that we can put on your website again showcasing all the things that you do, and then hopefully engaging with more visitors that are looking for a more local dark sky experience.

Another example I see people doing permanent or temporary exhibits or like waysides, like the night sky trails which are really fun, gift shop items... So just another way that you are engaging with your audience.

Then another opportunity for you to upload photos.

Then this one's a required question, “what steps are you doing to reach new audiences and promote the dark-sky movement?”. If this was not part of your efforts last year, what do you plan on doing in 2023? So this is something that we ask for places to do. So now that you are established and you have a certification, how are you working on getting more people involved in the dark-sky movement and how can you get them to be interested in providing actions to conserve the night sky and want to ensure this resource stays around for future Generations. Because I do not work for the park I'm just going to put a generic statement that they will do X, Y, and Z. As much detail as you can provide here, the better.

 Oh now I see there are errors, so I forgot something. It's going to highlight -- oh I forgot the sign, so I'm just going to put in IDA's logo here.

[00:37:44] Partnerships

[Luke Gommerman] Hey Ashley can I ask you a quick question?

[Ashley Wilson] Yeah go for it.

[Luke] Hi this is Luke Gommerman in Utah. I'm just noticing there's a number of questions that are popping up in the chat which started about maybe 10 minutes past the hour. I'm just wondering if you want to address those as you're rolling through or just save those until the end?

[Ashley] I want to save questions for the end. I figured there will be a lot and I want to make sure I go through the entire form first so we have it record and then I'll go back to answer questions.

We're almost done. The outreach section was the biggest one; we have only had like two or three more slides.

This page is actually pretty optional. This is just asking “how are you working with different partners in your area?” So if you have, how did you collaborate, and like what was the results of that collaboration. So I want to copy and paste what I saw from the Voyageurs example. They were pretty good at listing their partners in the outreach section. Starry Skies Lake Superior is one of our chapters; this is kind of like they're “friends of” group that supports the park financially; Heart of the continent is more of a regional group that supports Dark Skies. So this is another example that they could go into more detail if they wanted to.

“Any grants or funding for projects during this reporting period?” So this is a question we get asked a lot - how [do] people invest in and make these changes happen. There's all kinds of things that you can provide here. If you've got any like energy incentive programs for helping retrofit your fixtures; if you happen to get funding for like an interpreter or seasonal staff; what else did I see last year?... Someone had like an /…/ artist in the park kind of deal - they are able to support that. That's information you can provide.

We also, again, another cross-collaboration program question is “if you have worked with an IDA delegate or chapter?”. So again note that if you are a representative of a chapter or a delegate, that's going to be separate, that's a different report. So we're just asking for what the place specifically did to partner with that chapter. If it's an outreach event, if it's education, if it was supporting an applying IDSP, that kind of stuff. I think for the purposes of the demonstration I just said, "See outreach examples with the chapter." and then kind of like a generic [statement] looking to expand any more events, kind of deal.

Some people like to provide examples of conservation or research programs and it's always really interesting to see the creative ways that people are tying in Dark Skies with all the research that's going on. If it's Wildlife and ecology; if it's human health and safety; if they're doing community night walks kind of deal. So that gives you the opportunity to delve into that if you want.

The only required question in the section is again “how are you planning on engaging with existing and new partners in the next year?”. So we have another link in that document for examples of Partners to help you brainstorm what are the type of things that you can do now that you're certified place and then give us something to look forward to in the next report in this section.

[00:41:34] Success in Light Pollution Control, Leadership, and Future Threats

The last major section is talking about success in light pollution control and how we're documenting that. And so this kind of like goes off of the Partnerships and being able to say, "okay, we're making these connections, we're having these conversations. Do those connections help reduce light pollution that's out of your place's control, especially if there's a light dome?”

So I think there are some community and Reserve specific questions in the section which is why we're not seeing it right now in my example. For a park, it is asking “[for] the threats [identified] in your application, have they increased, decreased, or stay the same?” If you did like a 360 [degree] panoramic view and you can say, "Okay, so this light dome if from this community /.../ Have those light domes gotten any bigger, are they about the same?” Or maybe [you’re a] community and there's growing development that wasn't there before when you applied. This is kind gives us an indication of what's going on and especially if somehow your SQM measurements aren't always tracking that change. This gives you the opportunity to explain that in more detail.

Then as you identify these threats, provide an explanation of what you are trying to do to mitigate it. Again we're not going to hold you accountable for lights that are out of your control, but you do have a voice and your partners have a voice and you can be proactive and trying to educate people and be aware of these changes before they get out of control. So that's what we're looking for in this. I made a very generic statement -- you know, maybe the park connects with their Gateway Community, maybe they could connect with private property owners. Again, that's just something I came up with as an example.

[00:43:39] Change in Ownership, Place Size, or Access

Changes in ownership, Place size, or access

This is just letting us know if you acquired any property, if you sold any property. I do know there are a couple places that are interested in expanding their boundaries so just making sure that we are staying on top of that and that our reported area of protected Dark Skies [is] up to date.

We're going to ask that you provide the total size in square kilometers (km2). I know people like to use different metrics and that messes up our total count. So please make sure that it's in kilometers. If you're used to using like acres or square miles, you just type it into Google and it'll convert it for you, which is what I did for Voyageurs. /../ If you [did] have any changes we give you opportunities to update that here, but since they didn't, we just push next.

[00:44:42] Additional Information and Submission

And the last section is just giving us any indication of anything else that we could have possibly missed.

What does the certification mean to you and your staff and your teams? We are wondering what you considered the greatest single benefit of the certification?

We also want to know if you had any dealings with IDA in the last 12 months, and if so how are they handled? Just want to make sure that we are the best resource for you and if we can improve in any way.

Then if you wanted to share anything else that we possibly didn't cover or give us any final feedback.

 Once you are all done, you're happy with your answers, you push submit and then you can immediately download the PDF for your records, if you want to share this with anybody. Then this is what it looks like. It puts everything in this nice, clean format. The spreadsheet for your data actually opens as a hyperlink. It will be there so if you want to share with anybody, it automatically gives them that file. Same thing, the images show up. And it's also broken down by those different sections. This is what we plan on putting on our website but then you'll immediately get it at the end, so you don't have to worry about, you know, if you do all the effort putting the form together you have something to show for it.

That is the entire form. Like I said I want to go into questions about the changes in the sky quality protocol but I want to answer all these questions that you have for everything I just shared.

**[Skip 00:46:41 - 00:47:30]**

[00:47:31] IDSP Form Questions

1) Larisa asks, "Does it save when you click 'next'?" No it does not. It only saves you push "Save" and it kind of closes everything out [because] it acts like you're done. You have to reopen the sent email link to continue that progress. If you have the downloaded document that we prepared for you, and you can save that and make your changes, I think that's the best way to save your answers and your progress and again why we really encourage you to try to fill out that form in one go.

2) Mark asked, "What if your dark sky park has two different management agencies - does each agency fill out a separate report?" So Mark I think you would just submit one report. I don't have too many examples of parks with the multiple agencies and I think it's like, it's just what you've done in the past -- just put everything together like Reserves do. Or you just kind of have your point people grab all the information from outreach to Sky quality measurements and just put it all in one document, if that makes sense. I'll think of that. I'm pretty sure that's how we would do it moving forward. If you feel like the answers are too separate and if you wanted to submit two separate forms we can do that but I kind of feel like you should be able to do it one go.

3a) Remi asked a really good question. "What should we do for using a different instrument than the handheld SQM?" So we are going to upgrade our methodology as time goes on. I just wanted to start with the handheld SQM because I figured that is the Baseline, accessible method that most people are using. I just wanted that to be standardized, so if all else, we have that. We are going to investigate from other sources that have more experience with the permanent devices. Also, we know people are proposing using like a DSLR camera with a fisheye lens to get more of an all-Sky quality view, so there's going to be multiple ways that you can technically submit your sky quality monitoring metrics. If you are using the TESS or the NINOX or the SQM-LE those are totally acceptable. I don't know what the submission Reports look like. I haven't personally spent a lot of time looking at them but they still need to be submitted in a way where we're getting like an average or being able for me to quickly assess what the typical night sky quality at that site between that year should be like. If you want to have a conversation with me later on how it looks like we can. I don't think having like a 20 page report of just numbers is really going to be a quick assessment so I don't know how you tease apart multiple daily measurements taken to get to the quick answer. But the bottom answer is there multiple ways to measure night sky quality and we accept different ways to do it, so it's not like we're not accepting it. I'm just starting from the Baseline and moving out.

**[00:50:55]**

3b) [Ken Walczak] Ashley real quick question ‘cause I already have a similar question as Remi./../ If we did the SQM no problem but had additional information, how do we submit that? So it would just be kind of an addendum you know?

[Ashley] Yeah you can add multiple forms [entries] with the same upload field. So if you had the SQM, and you had the other ways, and if you had photos, you could just put all of that in that same [upload] entry form.

4) Rafael asked about data points in measurements -- I will also go over in just a little bit.

5) Steve asked, "We divided our Reserve into grid squares for place names; can we reference the grid Square G7?" Is that for sky quality or outreach? I'm not familiar with the grid system but if you provide a map...

[Steve] It's a map that's been split into smaller grid squares so we can monitor each thing, so we're looking at 3 square kilometer grid squares. And the idea there is that because we have a team so we have a record going back for about 6 years now for each of the grid squares. /.../ I mean there's just a field somewhere in the middle of nowhere and another field somewhere in the middle of nowhere, so place names [aren't] that easy here.

[Ashley] I think that would be fine and like as long as you provide the map and you like that could be another material that you upload if you wanted to provide your methodology.

[Steve] It's what we did in the original application and it's what we did in the reports since then.

[Ashley] As long as you're being consistent, that's the major thing and if you're going to the same squares.

6) Erin asked, "Do we only note what changes we have seen since the certification or overall in the site's history?" That is a good question [because] I figured there are situations where people have a lot of data since they've been certified so if you have that information, like, you are more than welcome to share that. And that does give us a longer history and scope of how this resource is changing. I think my assumption is most people are more aware of this resource as they were really getting into the application and hence, but yeah please do. You're welcome to provide as much information as you want, that would be great.

6) Sonya asked, "How often do you calibrate the percentage of compliant fixtures and [if fixtures in] the original inventory have been removed?" That's a good question. I mean since it's a question that we ask every single year like that's something that you should be tracking and Reporting. So if you don't make changes from like 2021 and 2022 you could just ideally provide the same inventory table and then in the description just say no changes were made, and you're still meeting that Baseline compliance rate, then we're good. As a reminder for Parks, Reserve cores, and sanctuaries you're already at least 67 percent when you applied then you have five years to be 90% compliant and 10 years to be a hundred percent to be compliant. So if you originally had these non-compliant fixtures when you applied and you have since removed them that would be considered an action towards your compliance rate so you would just update your inventory table as you would as if you replaced it with a dark sky friendly light. Then yeah once you get to 100% compliance then you would still need to update us if you did change your lights to ensure that they're still dark sky friendly and ideally following our guidance at that time because we're constantly changing our practices based on what we learn in the field and how the technology evolves faster than practices do. All of that is just information that we would want to see in a report but I think that would just change based on the amount of actions that you invested in that particular year.

7) Sabine asked, "Will I receive the record afterwards?" So yes you will get that PDF.

8) Susan asked, "Is the new list of fixtures the one we need to use when specifying the fixtures we use?" Yes, so you already provided the bulk of the fixtures that you have in your application so we just want to see any updates. If you do like I don't know, like if you're a community and if you had new street lights, for example, we would just want to see the specification sheet of head. If you have like a bunch of like cabins for staff housing, for example, and if you all replaced them with the same type of fixture you would just provide the specification of that fixture or the information. But yeah we don't need you to report all of your fixtures every single year. This is not meant to be a cumbersome process. It's really meant to say what are your updates and what are you doing to keep the momentum going.

9) Steve asked again, "If we have already sought and be granted an extension due to Covid, do we need to put it in the form again." If it's already been granted, no. That question is more for people who have not brought that to our attention we really want to have a conversation and I just want to invite that to anybody who wants or needs it, but if you've already had it then you don't need to bring it up to us again. It's already in your records, so thank you for asking.

10) Vermadel asked, "Do we include programs on light pollution done outside the park?" If your Park staff are the ones that are leading that effort than yes. And I do encourage that because if your efforts are specifically engaging your gateway communities or if you're trying to educate like your county or someone else to maybe adopt an ordinance or just getting them interested in the idea that these practices work and it's beneficial for them and maybe you do need to travel to have these conversations, then yes absolutely that would count as one of your Outreach events for sure. I think I mentioned it as [an aside], but we do accept virtual events especially in the light of Covid. So if you had like a webinar talking about one of these values or let's say you sat in (again let's say if you are a community) and then sat in like a town council meeting talking about the community status or policy or something like that would count. It doesn't specifically have to be in your site. As long as it's promoting the dark sky movement in some capacity, that's what we're looking for.

**[00:58:27]**

Another thing that we will plan on doing hopefully in the next year or so is developing different guides on how to do all these different actions. So one thing that we're working on is a "best practices outreach efforts guide" and I want to emphasize efforts rather than the events because there's different ways that you can engage with your audience and different people, and we want to encourage that creative flow that a lot of you like to invest in. So another conversation for another time.

11) Steve -- yeah so that's actually going into Steve's question, "Do events include those offered by astrotourism companies or only those by the management team?" If the events are happening in your site and if you recognize that this astrotourism company is a partner of the park and you have this relationship, [then] you need to show that these tours still include IDA somehow as a reference /.../ or the tour guides are putting that into their program, then that would count. But if it's not then I don't think that would count, if that makes sense.

*[Note - ‘Dark skies education’ refers not only to astronomy education but also education about wildlife, energy efficiency, safety, and human health. Astronomy education events such as star parties ONLY count as ‘dark skies education’ if they prominently feature material about dark skies and outdoor lighting.]*

12) Yes, so Lori makes really good comment, "This is a major shift in reporting.” So not only is it a major shift, we are providing it at the end of July, so more than half the year is done. There's a lot more intense and detailed questions than what a lot of you are probably used to. So that's why I really want to focus on making sure that at a minimum you're getting those required questions in. But I put in all these other questions too because I've seen them in other reports, so it has been done, and then I also want your teams to start thinking about these more holistic questions. How can we really have a discussion about what are the metrics of success that your actions are contributing to conservation [because] that is first and foremost the purpose of this program. And so the actions that IDA sets for you -- if it’s policy; if it's lighting retrofits; it's outreach and education; and monitoring the night sky -- like they all contribute to that long-term goal. And so there's many ways to get about it especially with those Partnerships and we want to see these conversations evolve over time. Yes, if you aren't able to answer a lot of these questions that's fine, but I do want to see efforts that you start to incorporate it into maybe like your interpretation plans or with your/.../ higher-level, like if you have a 3-5 year plan, like those are the types of things that should be progressed over time.

13) Rafael, when you say solar programming do you mean programs during the day? Is he still here?

[Rafael] Yeah I'm still here. Your example when you were uploading stuff you mentioned solar and the picture looks like it was during the day so I was wondering if that counted.

[Ashley] I think it's like an astronomy-based event so they have like those solar telescopes where you can see Sunspot safely or maybe it was like a special event. /.../ Then that kind of goes with like going to town events or like educational events for like kids during the day like if they come during school and such. So it doesn't have to be specifically at night because the outreach events are paired with the regular Public Access of people coming to stargaze naturally and there's different ways to encourage people to come to the site, both during the day and at night and have that connection. Does that make sense?

[Rafael] Yeah that's one great for us out here in the desert.

14) [Sabine Frank] Ashley - This is Sabine from Germany. My question was we got our acknowledgement with the old rules not needing to comply -- having now an indefinite time to comply and that's my question basically but I think I think it's been answered. So it's well it's the old rules so it's still rules, or am I mistaken?

[Ashley] And the old rules like if you applied under the 2015 guidelines?

[Sabine] and yeah the 2013 guidelines, I think it was. No - 2011, I think even.

[Ashley] Yeah you are one of the older ones. That's interesting - I kind of have this disconnect of what happened over a decade ago and where we are now. This program has just evolved organically over the past decade.

So we've always had the agreement that once you're certified into a guidelines [version], you stay at those guidelines, so we're not going to put new expectations on you. My comment was more - let's say if you did invest in like a community-wide project or like if you did know there's a new Housing Development or something. We would encourage you to help promote our active policies. So like right now we have our values-centered approach and our five lighting principles. We didn't have that 10 years ago. Since you have that available, could you provide that to these development owners and encourage them to think about the more holistic ways we think about lighting now. Because we don't want to have the conversation that a 3,000 kelvin, fully shielded light is completely dark sky friendly because it's not. Like those lights can still produce glare if they're overly bright. /.../ That's what I mean, we want to evolve how we have these discussions but I'm not going to look at your inventory and compare it with the 2018 guidelines and say you're no longer compliant.

[Sabine] Okay that helps. .. Well you know we all know it's a process. Okay thanks.

[01:05:40] Updates to Sky Quality Monitoring Protocol

These last few questions we are getting are about the sky quality meter handheld protocol, so I'm going to switch gears and go into that. I will share my screen again.

Okay so we have our bookmarks on the side of here so if you want to jump to a specific section you can. We have a couple different links to help you through this process. Over here we have an example that does a pretty good job of demonstrating the different things that we are requesting.

As I mentioned before, this only currently has a protocol for the handheld SQM and we will change this overtime to include the different metrics we currently accept. There are a couple big things that I want to point out that are different and that we want to make it our standard moving forward.

So if your primary way of monitoring is with the handheld device, we want you to plan on taking four replicates each year. And a replicate is when you go out, like let's say 'new moon period'. And the reason --and we have this reference here if you want to go and look at the papers that support this -- is because we do see seasonal variations in skyglow throughout the year. The ideal timing would be between equinoxes, so they suggest one period in April to May, one in July or August, once in October, and once between December and January. In an Ideal World if you're able to take measurements in those four periods that gives us an idea of the brightest and the darkest changes in skyglow just from natural phenomena. Then that way we can have a pretty consistent Baseline of what the typical night sky experience is. Now I said ideal because there [are] a lot of times when that's not possible, and I do make that note here. So like if you have difficult weather conditions, staff shortages, etc. That is acceptable; you would just need to talk to IDA, like "Hey, we can't do it this time, can we you know double up and have like an April and a May measurement protocol and then like two times later in the year, or something like that”. What would be your proposal to try to aim for these four replicates each year.

If you do have the permanent device it is kind of a nice alternative to this because you just have the device out and then you should be able to calculate like when it is New Moon; you should be able to figure out when it is a cloudless night; and then if you are low on staff or you are in a remote place, that device is going to continuously take measurements so you don't have to try to predict when is the best time to go out. So that's something that we will provide and we do have some links to these other devices as well to do that. I'm just going to focus on the handheld SQM for now.

I go into some examples of when to take measurements, so you want to go out when true night begins and the moon should not be visible. I give you specific positions below the Horizon and a link where you can calculate when that happens at your specific location so that shouldn't be a surprise. Same thing here, some other links for weather, haze if that's going to be an issue. Also try not to go out too late into the night because if the Milky Way is present, the light from the galactic core can actually interfere with your night sky measurements, so that's taken some advocates by surprise. That's another thing to look out. Then the same thing with cloud coverage, you really don't want clouds during your measurements especially near the zenith. That can actually make your measurements darker.

[01:10:05] Designing and Updating a Survey

This is more for newer applicants but this could be a good refresher as well on how to design a survey and how to pick the locations that you'll be going to every single time you go out. But then this also talks about that map that I mentioned earlier. You need to provide an image showing where these locations are (or your grid if you're Steve) and then also providing the geographic coordinates so we can ensure that your people are going to the same place every single time. We want to be consistent with our methodology.

I provide survey examples. I recently went through an example with Black Canyon of the Gunnison National Park where they originally had like 13 or 14 locations across their site for their application, and now that they're certified we have that Baseline survey but we don't need all that data. So we can take it down a little bit. And the reason for that is we can compare their map boundary with this light pollution map boundary [from] the The world atlas map and we know that the northern and Eastern areas are going to be darker and these areas closer to this community of Montrose are going to be brighter due to their light dome. So it's pretty clear to see that we're not going to expect a lot of changes in night sky quality in these more remote, harder [to access] areas. So now that we have that baseline we really want to focus our efforts not only in this region because it's closer to this light dome, and perhaps it will grow over time, but also this is where it's most likely where visitors are going to go. So it's that combination of what is the data that we're looking for in terms of both in monitoring the resource and then also guaranteeing that your visitors -- if you are a park or a sanctuary or Reserve core -- are indeed seeing the Milky Way with the unaided eye on any given night. So here's the example of their measurement points and everything I just said in a narrative format.

If you want, I will probably just put this part on our website when this is finalized and this could just be your handheld instructions that you give to your staff and volunteers that go out and help you take measurements. But it talks about all the materials that you should be taking out when you go out; how to use the device --and it's super important to point out that you never point the device anywhere except straight up towards the zenith. So here is my SQM-L device. It's going to be perpendicular to the horizon. So I just point it straight up. I'm not going to point it at a 45-degree angle or any light domes, just at the zenith. Here's what that looks like if you want a figure.

[01:13:00] Important SQM Changes

This stuff in yellow is also new and we received some feedback from our Dark Sky Places Committee about how the Observer should be facing or where they should be facing when taking measurements. /.../ I'm still waiting for final confirmation from some of our experts that I'm waiting on. But the biggest changes are they suggest taking three discarding measurements. So before we just said take one and discard it but now it's saying take three to kind of get the device to wake up and to make sure that it's going to be more precise with more measurements so it reduces error by taking out those initial measurements. And then we're going to ask you to record a total of 5 measurements. Each measurement is going to face one of the cardinal directions, so you turn 90°. And then the fifth reading -- this is important because it's an odd number it allows us to calculate the median. The median is a nice statistic in data especially if your data is skewed. Let's say your data is brighter or darker than expected, it's not going to lean in one direction. And then I'll have some directions on where that fifth direction should be facing. So once this is completely finalized I will send it out to all of your emails. I'll put on our website. I'll try to make it as transparent as possible so you all have this and then hopefully this will be the standard guide that everybody uses moving forward.

[01:14:37] SQM Spreadsheet Instructions

And then here is that spreadsheet that I mentioned earlier. So you can just click on this and you and you can download this. We go through what all the different columns mean, how we want you to enter the information. There's also this example replicate here. So this was just some data that I pulled from an application just to give you an idea of what your data should look like. Then you can just copy and paste this replicate and enter it as many times as you want. So if you take four replicates [or] if you're taking replicates every month, you can just copy it and put it in here. The other thing that I wanted to point out that I forgot is we made another one, another spreadsheet. I know people still like to take notes in the field with like a pen and paper, so that's what this document is for. If you want to print this out and hand it out to people so they can write stuff down and then you can take all of that data and put it in one nice, consistent spreadsheet. And I think that's it, that's basically what this is. I went over the major changes. I'll stop sharing my screen and answer questions that are in the chat.

[01:16:06] SQM and Final Questions

1) "What is the deadline for sending the report?" So the report is officially due January 1st of 2023. I'm planning on opening the online form two months before, so November 1st. I'll send an email to everybody, and I'll send like two-month warning and then a one-month warning and then a one-week warning. I will always include the link to the form, the link to the companion document with all the questions, everything I just went over and I'll make sure to include that in all of my emails that you all have it. If you are experiencing difficulties with the form for some reason, just let me know. We can work with that. In the event that your reporter feels like they can't meet the deadline you may request an extension. That can just be sent to my email which is ashley@darksky.org. Just let me know why you're having difficulties and we can work with you. Again if you don't communicate with me, I don't know what's going on. So if you don't meet the deadline, if you don't reach out to me, then by our policy that would make your place suspended until we received that report. I don't want to do that to anybody so just letting you know what's going on and we can work through that together.

2) Sonya asked, "Is there an acceptable numerical adjustment for overhead Milky Way or just a narrative note?" I think the Unihedron website has that unless someone in the chat knows it on top of their head. I don't want to say what, but I know it exists. If you email me, I can find it for you.

*[Note: The northern Milky Way contributes about 0.10 mpsas under 21.5 mpsas (moonless) skies. The southern Milky Way might be as big an effect as 0.85 mpsas where it goes near-overhead. For more information, see Surface Photometries of the Milky Way (Schlosser+ 1997).*

*For the purposes of the SQM spreadsheet, reporters may simply make a note of the presence of the Milky Way and do not have to worry about this calculation.]*

*/...Skip/*

**[01:18:55]**

3) [Ken] I might have missed it, but is there a link to that SQM document and the spreadsheet? I didn't see it.

[Ashley] Yes, I will share my screen again. It's in two places. So in the annual report document, the one with the questions in the sky quality section, I have it here. So I have both the link to the downloadable form and the instructions and the form itself (it's closed now) but the links are in the form too. So in case that's what you're working on it's there and then all of this will be on our website hopefully within the next week.

[Ken] Okay, another question. Do you have a link to that you're showing us right now? I don't -- I might have missed something there.

[Ashley] Let me pull it up. /.../

[Steve] Any chance the links could go just into the chat so we can just take it from there?

[Ashley] Yes....This is our website. All of the place category [Guidelines] have a link that go to writing the reports. So you can see when I last updated it and here is that link to the document with the questions. Then all the explanations I put are here. Once the annual report form is live I can put that sure too. Once the SQM instructions are actually published, we'll completely update our "how to monitor night sky quality" page. So I can put the link to that if you need it. So it's not updated yet so I'm not going to share that link right now [because] it's not available but once it is, I will make sure to share that.

Anything else, anything at all?

Well I think we're quiet, so I'll stay on a little bit longer in case anyone comes up with any questions, but thank you all so much for your time and coming to this. I'll send the recording and all the links once we're done talking and then if you do find that you have questions about the report when you're working on them, please feel free to reach out to me and Amber at any time. Alright well thank you, have a good rest of your afternoon or mornings or wherever in the world you are. It's great to see everyone.

**[01:22:00] END**