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ABSTRACT
This year marks 200 years of diplomatic relations between the United States and Argentina, which has involved cooperation across a wide range of fields, including tourism. In the interest of finding new approaches to improve the capacity of national parks for public use planning and management and develop mutually beneficial ways to deliver higher-quality visitor experiences, the United States of America Embassy in Buenos Aires, the George Wright Society, the US National Park Service, and the Administration of National Parks in Argentina proposed the “Binational Exchange Program to Enhance Visitor Experiences in National Parks” as a co-learning exchange between the two countries. Through a critical review, this article focuses on the application and adaptation of the US Interagency Visitor Use Management Framework for public use management in five national parks in Argentina. The article offers an overview of the framework, summarizes the project developed with the parks, and, more importantly, discusses lessons learned and recommendations for future implementation of the model in Argentina and, possibly, other countries in Latin America.

INTRODUCTION
Historically, protected areas around the world have been established to meet conservation objectives, but often they have also been created for other purposes, such as private recreation and hunting grounds for colonial powers as with Albert (now Virunga) National Park in the present-day Democratic Republic of Congo (Lee 2023), to promote a new railway line as with Yellowstone National Park (Smith and Hoy 2009), and ensure national sovereignty in Argentina (Picone et al. 2020). Over time, many protected areas have adopted a pro-tourism stance to the point that economic activity has transcended even conservation as a primary objective. In the mid-20th century the parks in Argentina made a transition from focusing on sovereignty to economic generation (Picone et al. 2020). In 2005, the National Tourism Law in Argentina elevated tourism as a strategic and essential economic activity, defined as a priority for national policies, albeit with some consideration of sustainability and conservation (Bukart et al. 2007). Currently, visitation to national parks in Argentina has not only recovered from the Covid-19 pandemic but shows a sustained increase, nearing previous levels (Sistema de Información Turística de la Argentina 2023), and the new administration of President Javier Milei in 2024 has prioritized tourism, once again, to generate more income for the country.

For these reasons, visitor management—also known as public use management—has become increasingly relevant for Argentina’s protected areas. They must manage for environmental, social, and administrative aspects of visitors who participate in non-extractive activities, such as tourism, recreation, research, and education. Even though Argentina has been concerned about public use planning and management since the beginning of the 21st century (Balabusic et al. 2003; Bukart et al. 2007; Administración de Parques Nacionales 2012), different studies have questioned the effectiveness of public use management (Martin and Chehébar 2001;
They came together to share lessons learned from the use of previous management and planning models, such as the Limits of Acceptable Change (LAC) and Visitor Experience and Resource Protection (VERP), to establish one consistent model that would work across areas managed by the different agencies using one set of concepts and a common vocabulary (Cahill et al. 2018). With this framework, Council members aim to provide better visitor experience opportunities at their sites, while offering sustainable access to the natural and cultural resources visitors seek (Interagency Visitor Use Management Council 2016).

The framework integrates four elements, with several steps each that define the why, what, how, and actions for visitor management (Figure 1).

**THE PROJECT**

The international capacity development project for public use management, “Binational Exchange Program to Improve the Visitor Experience in National Parks,” was planned as a two-year project to take place in 2020–2021 but, because of the pandemic, extended to 2024. The project design called for an international team (the Social Science Team, or SST) composed of the four authors of the present article, all of whom are specialists in public use management and who represent three universities and a non-profit from the United States and Costa Rica. The SST offered an introductory online training about IVUMF for staff of 26 Argentinian national parks and then concentrated on five focal national parks chosen by APN and the US Embassy—Chaco, Ciervo de los Pantanos, El Leoncito, El Palmar, and Monte León (Figure 2)—to introduce a desired condition-based approach to planning and managing visitor-related conditions, as described hereafter.

This article focuses on the application and adaptation of components of the US Interagency Visitor Use Management Framework (IVUMF) for public use management in five national parks in Argentina. The article then offers an overview of the framework, summarizes the project, and the capacity development process developed with the parks, and more importantly, discusses lessons learned and recommendations for future implementation of the US-centric framework in Argentina and, possibly, other countries in Latin America.

**THE US INTERAGENCY VISITOR USE MANAGEMENT FRAMEWORK**

FIGURE 2. The five focal national parks (red ovals) where the onsite phase of the Binational Exchange Program to Improve the Visitor Experience in National Parks was carried out. Clockwise from left: El Leoncito, Chaco, El Palmar, Ciervo de los Pantanos, and Monte León (Gobierno de Argentina 2023).
The SST worked with one long-term professional in public use management from the central APN office in Buenos Aires who coordinated and championed the project with the five parks, as well as with representatives from the US Embassy in Buenos Aires.

** METHODOLOGY **

The assessment of experiences (“sistematización de experiencias”) is a critical approach developed in Latin America during the 1970s (Jara Holliday 2018). It is a constructivist methodology that uses a critical analysis about an experience that leads to a “lessons learned” process of reflection. This methodology involves five steps: researchers participate in the experience; define objectives, object, and focus of the process; document the activities and analyze the experiences and memories; reflect about them; develop conclusions, lessons learned, and recommendations, and share what was learned (ALBOAN et al., n.d.; Jara Holliday 2018).

In this case, SST members participated during the entire process along with staff from the Embassy, APN headquarters and regional directorates, and each park. Records of all activities, meetings, visits, documents, and field notes generated during project implementation from September 2020 to March 2024 were kept. These records, along with additional data gathered after project conclusion (for instance, testimonies from APN focal park staff) were used to analyze application and adaptation of the IVUMF in the five focal national parks in Argentina.

** RESULTS **

The Binational Exchange was initially proposed for 2020 and 2021. Because of the pandemic, however, the proposal substantially changed, and implementation—virtual and face to face—extended into 2024, summarized as follows.

** Phase 1. Initial contact with staff from the US Embassy and APN headquarters, regional directorates, and personnel in five focal parks **

Using Zoom, the SST hosted an initial meeting in September 2020 with the APN national and regional directorate staff, and park personnel (Figure 4). During that meeting, contact details were collected from all attendees for future communication.

** Phase 2. Webinars **

Over the course of three months in the fall of 2020, up to 48 participants, representing 26 different parks, engaged in a series of webinars to support public use enhancement projects at their respective parks.

The live, synchronous webinars were supplemented with asynchronous pre-recorded videos by the SST with corresponding homework assignments. The SST solicited all parks that participated in webinars to complete assignments, but principal feedback was provided to the five focal parks in preparation for more in-depth work in the fourth phase of this project. All webinar materials and presentations were translated to Spanish and made available in the cloud for participants.

- Lesson 1 (September 2020, two hours): Principles of the Interagency Visitor Use Management Framework and Element 1 of the framework. Additionally, the SST administered online questionnaires to managers at the five focal parks to ascertain their views of visitor experiences and perceived visitor preferences. Park managers also were asked to inventory their human, social, financial, physical, natural, and cultural assets as homework.

- Lesson 2 (October 2020, one hour): What are desired conditions and why are they important? As homework each park had to define the team, locate a site within their park where the IVUMF was to be applied, provide information about the site, develop a management objective and a desired conditions statement, and identify related infrastructure and services.

- Lesson 3 (October 2020, one hour): What are indicators of quality and thresholds and why are they important? For their assignment each park team had to create indicators and thresholds for the selected site.

- Lesson 4 (November 2020, one hour): Integrating desired conditions, indicators, and thresholds through adaptive management and associated management actions. For homework, participants were asked to identify existing conditions that aligned and did not align with the desired conditions.

- Lesson 5 (November 2020, two hours): Using lessons learned in the first four sessions and material they developed through homework assignments (with
constant feedback from the SST), the liaisons for each park gave a short presentation linking desired conditions, indicators, thresholds, and management actions.

**Phase 3. Pandemic pause**
Because most meetings and site visits were postponed during 2021 and most of 2022, the SST created and distributed various public use materials to participants to maintain park engagement during this challenging time. A primary means of maintaining this engagement was through a series of bulletins (i.e., newsletters):

- Bulletin 1 (April 2021): Heritage interpretation, Part 1
- Bulletin 2 (June 2021): Heritage interpretation, Part 2
- Bulletin 3 (August 2021): Visitor management research
- Bulletin 4 (September 2021): Tourism concessions and partnerships
- Bulletin 5 (October 2021): Planning and adaptive management
- Bulletin 6 (November 2021): Carrying Capacity vs. Limits of Acceptable Change
- Bulletin 7 (January 2022): Public participation and public use management

Also, a series of existing videos were shared with participants on the following topics:

- Public participation
- Visitor capacity
- Interpretation
  - Missing piece of the visitor experience
  - Model interpretive tour in Honduras
- Condition-based park zoning
- Holistic heritage planning
  - Live presentation in Mexico
  - Three-part video series on holistic heritage planning

**Phase 4. Back to work**
After the pandemic pause, in January 2023 it was possible to resume conversations and prepare for onsite visits. A virtual live meeting was held to recapitulate past progress, highlight what was to come, provide information about new accomplishments by parks, and suggest with the parks what to concentrate on during their summer season so that they would have sufficient information for when the SST would visit parks later that year.

**Phase 5. Virtual consultation with the five focal parks**
The project draft produced by the parks during Phase 2 was the starting point for the learning exchange, which involved staff from the five focal parks, and liaisons from the Embassy and APN central offices. As part of this process, the SST sponsored five virtual meetings during early months of 2023, one with each park, to become more familiar with park staff prior to visits, review projects, and complete some additional tasks:

- Reflect on what each park had accomplished so far
- Discuss additional information found since the fall 2020 webinars
- Clarify additional public use related issues and challenges
- Prepare for onsite park visits

**Phase 6. Onsite, in-depth assessment of public use**
The SST traveled to Argentina twice to conduct onsite consultations at the five focal parks (Figure 4).
Phase 7. Reports and outreach

Based on the results of the virtual and onsite workshops, the SST prepared site reports for each park with suggestions for improvement. The reports were delivered in 2023 and after each park reviewed the report, the SST met with all parks in early 2024 for feedback and to generate the final version. The present article in Parks Stewardship Forum shares information and lessons learned from this project.

DISCUSSION AND REFLECTION

The IVUMF provided the basis to implement a systematic approach customized to each park’s needs, and to develop a project of adaptive public use management in a way that the experiential, infrastructural, and ecological conditions of the project site could be managed sustainably. This section considers logistical aspects that could have positively or negatively influenced outcomes as well as technical aspects that required some adaptation. Finally, this section contains reflections about the challenges of exporting models and considerations to minimize them.

Logistics

COVID-19 pandemic. Much has been discussed about the uneven response in developing countries and the effects of the pandemic on international cooperation and development. In the case of this project, on one hand, there were many impediments, from staff and participants getting sick, to vast uncertainty about when it was going to be possible to visit sites or review proposals—or even continue the project. On the other hand, the time between the webinars and the onsite visits allowed both park staff and the SST to rethink and have a more mature analysis, even improvements, of what was initially proposed and, in some cases, allowed adjustment or confirmation of initial proposals in terms of indicators or even the project site itself. For instance, during the workshop at Chaco National Park, the desired condition statement was revised by park staff to include elements like a camping area, visitor center, and a new trail bordering the Río Negro that did not exist at the beginning of the Binational Exchange.

Change of personnel, government, and Embassy officials. As with every government agency, rotation or replacement of personnel is inevitable. The long pandemic delay, however, aggravated this process because there was not only a change of personnel at the parks and for this project’s working teams, but also a change of government officials, and even at the Embassy as well, which required adjustments with the working teams. Fortunately, staff in key positions at APN, the Embassy, GWS, and the SST remained in place so that communication continued during the pause and until conclusion.

Communication. People from urban or developed areas usually take communication technologies for granted. But it is different for people who live and work in less-developed and remote areas, like national parks. Even those who have easy access to these technologies do not always prefer or feel comfortable using them. During the project, virtual encounters became the only way to maintain interaction for the first three years. Communication required trial and error to figure out the best channels with both APN authorities and park staff, from aspects like adjusting to different time zones for meetings or issues with Internet communication technology and availability, to more significant issues like identifying the principal point of contact with each agency and park with whom the SST could maintain contact. Once figured out, the process ran more efficiently.

Political support. One assumption of the Binational Exchange was that it was going to promote mutual learning and understanding between participants. APN staff are highly qualified and passionate about their work, and immediately established rapport with the SST. Having the right people on the project teams allowed constructive feedback and more efficient work. The focal parks also felt empowered and supported throughout this project, allowing them to be more proactive and confident about the approval of their proposals by APN authorities.

Technical aspects

Adaptation of the materials. A recurrent problem with international development projects from the US to Latin America is, as in this case, the lack of materials in Spanish. The Binational Exchange made a big effort to adapt and translate as many materials as possible for immediate application. Thus, some IVUMF concepts, such as the sliding scale or visitor capacity, even though mentioned during the webinars, were not considered necessary to include during framework application. In the future they could be included as warranted.

Building the foundation. The first element of the framework (Build the Foundation) involved understanding why the
project was needed and choosing a site to implement it. Unlike other management models that focus on an entire protected area, IVUMF allows the flexibility to choose project scope; for instance, working on a site as small as a camping area or the entire park. El Leóncito and El Palmar National Parks, for instance, chose a small section of the park for their projects: a historic apple and pear orchard and the park entrance, respectively, while the other parks chose a larger area of their parks.

Tourist demand vs. desired conditions mentalities. While the first element was well understood and rapidly achieved, the second element (Define Visitor Use Management Direction) required more effort. Switching from a demand approach mentality, in which visitors demand new or expanded services and parks comply, leading eventually to lower-quality experiences for all, to a desired conditions approach, in which the park and its stakeholder community envision the visitor experience and conditions they want to offer visitors, requires contemplation about the new scenario and questioning of older assumptions.

The desired conditions of an area reflect what parks managers would like to manage for, what conditions are ideal in their estimation, and what types of experiences are acceptable to ensure the long-term sustainability of resources, facilities, and visitor experiences. Although visitor preferences are incorporated, desired conditions are prescribed by managers and associated stakeholders, based sometimes on empirical evidence but always on management experience. For instance, the desired conditions for Monte León National Park’s campground emphasized the experience of solitude. However, people tend to concentrate in camping areas and, hypothetically or practically, demand more and more services such as places to park their recreational vehicles or build a fire, well-designed bathrooms, and hardened walkways leading to attraction areas. Specifying the desired conditions in this project area allowed managers to balance visitor desires while preserving opportunities to experience solitude, which ultimately produces a unique experience that is not easily obtained outside the national park.

In the future, as visitation grows and pressure from authorities and visitors increase, it could be easy to fall back into the visitor demand mindset: “The visitors are asking for more parking space, more bathrooms, more trails, so let’s build more facilities.” The outcome of attending to only visitor demand is unintended park conditions (e.g., ecological degradation, automobile congestion, decreased wildlife viewing opportunities) as opposed to desired conditions based on holistically incorporating management objectives, legislative mandates, available resources, and future projections.

Articulating desired conditions (and associated indicators and thresholds) paves the way to intentional outcomes and unique, high-quality park experiences, while a visitor demand mindset often leads to unintentional outcomes and often easily replicable, but low-quality, park experiences.

Choosing the right indicators and thresholds. There was a great deal of discussion about indicators and thresholds as targets to achieve desired conditions. Indicators are measurable and manageable variables that serve as proxies for desired conditions, and thresholds are the minimum acceptable level of the indicator variable. In many cases, the desired conditions would have many potential indicators and the SST had to help park managers select the most feasible for their unique context. For instance, one desired condition in Ciervo de los Pantanos National Park was: “Visitors have opportunities to enjoy nature through the contemplation of the landscape, perceive its tranquility, and hear few unnatural noises.” The park staff came up with several indicators: Number of bird species that can be differentiated by listening; the number of different sounds of nature; the number of visitor complaints for unnatural sounds, and number of decibels (dB) of human sounds recorded at different intervals. After discussion, the last was chosen, and park staff proceeded to formulate the threshold. In that case, because park staff did not have a decibel sound level meter and could not empirically identify a threshold, they elected to use the average human conversation levels (45 dB), as a threshold until they could acquire the instrument and experiment to choose a site-relevant threshold. It requires experience and practice to identify and choose indicators and thresholds. The IVUMF (2019a) offers examples and references that have been used in the US and could apply to Argentina.

Monitoring and management strategies. Once conditions and indicators were in place, the third element (Identify Management Strategies) required monitoring and management strategies. One of the biggest challenges for park and visitor management lies in the monitoring process. Often, parks struggle with a lack of personnel or resources and a short-term perspective, neither of which promote medium- or long-term monitoring.

All the projects chose effective and inexpensive approaches, like the use of visitor interviews and direct observations for their monitoring proposals. In some cases, the equipment that was required, such as a sound level meter in Ciervo de los Pantanos, or manual visitor counters in El Palmar, was inexpensive and easy to find. To apply and analyze the data, however, can take time and even the use of volunteers requires guidance from park personnel, to which managers need to make a conscious decision to allocate time and resources.
Monitoring indicators and determining when conditions are nearing or exceeding thresholds have direct management applications. The IVUMF (2019b) points out eight management strategies, including modification of type, time, locations, and distribution of use; of behaviors, attitudes, and expectations of visitors; and increasing the supply and ability of sites to handle the use. In all parks, suggestions for preventative and corrective actions were proposed for—in increasing order of investment— provision of information, interpretation, and education, changes to policies and rules, and altering infrastructure and landscape.

Implementation. Because of time and resource constraints, the final element of the framework (Implement, Monitor, Evaluate, and Adjust) was not completed during this project. Because projects were not imposed but chosen by the parks, and because they perceived the so-much-needed support by government officials, there was clear manager interest in implementing proposed initiatives. El Palmar, for instance, began to manage visitor wait time both at the visitor center and the ticket booth. Similarly, Monte León constructed sound and visual barriers around campsites to promote a greater sensation of solitude for visitors.

Risks of exporting models

Much has been written about the risks of exporting northern models into southern contexts, especially in the international and community development literature. In the protected area context, some examples also exist. For instance, Louder and Bosak (2019) talk about the dangers of importing the US park model into South America, specifically the negative effects that the neoliberal conservation model of Patagonia Park has wrought on local communities in Chile. Kohl and McCool (2016) give multiple examples of models that did not work in the South. In a famous article, Chapin (2004) exorcises the concept of integrated conservation and development, a model imposed by developed country organizations ostensibly to build capacity and economic opportunities for communities around protected areas, but which has proved to be manipulative and unsuccessful.

In the case of public use management, a version of the carrying capacity model was brought to Latin America in the 1980s (Cifuentes 1992) inspired by models from the US. While the concept kept evolving in the US for the next 30 years to the point many current practitioners do not even know about the earlier formulaic versions and have moved on to use improved frameworks and strategies (like IVUMF), in Latin America it has not changed. Carrying capacity is still a current practice, and in some countries like Argentina and Costa Rica, its implementation is required by law.

Ham et al. (1993) identified a variety of risks in exporting environmental interpretation models to developing country’s protected areas. In this respect, Reyes Rodríguez (2023) discusses intellectual colonialism in tourism and recreation research in Latin America. He defines different classes of epistemic racism, arrogance, indefiniteness, incongruity, dependence, subordination, provincialism, and lack of understanding of historic-epistemic tension. The author also states that, by recognizing colonialism, practitioners and academics can facilitate dialogues that better integrate the Latin American perspective. To avoid frequent failures, Ham et al. (1993) state that program developers must adapt their programs to local culture, audiences, social settings, and the biophysical environment. These authors further note a variety of important differences between developed-country and developing-country contexts whose incongruity can debilitate exported models. For example, the US has human and economic resources to implement their models; their protected areas are surrounded and buffered by unprotected natural areas; and by and large their protected areas do not have people living in them (anymore).

For some of these reasons, the application of yet another exported model can understandably provoke distrust. This project was able to ameliorate some of these concerns through its design features:

- The SST included Spanish-fluent Costa Ricans to mediate between Latin and North American cultures and languages.
- The US Embassy staff liaison was Argentinian and understood the local culture.
- The project had a champion inside of APN who liaised, coordinated, and supported interaction between the SST and parks.
- The SST adapted materials to the local context by designing training materials in both written and video formats for this project and in Spanish. It also left out materials that could not be translated, such as the methodological manuals and would have overly complicated this initial project.
- Perhaps fortuitously owing to the pandemic, the project extended its time frame from short to medium—especially important since development depends in great measure on building trust and taking time.

CONCLUSIONS AND RECOMMENDATIONS

Because of this four-year endeavor, several recommendations emerge for similar efforts in the future.

- The project champion played a pivotal role due to their passion for public use tools and methodology.
This person determines how to help parks, and with what tools within limited resources. Though the project did work with this champion who learned and understood the methodology, if this person retires or changes jobs, APN loses much of the capacity. Thus, the sustainability of the methodology in the country needs to institutionalize a sort of workshop that does not depend on just one person and could be enhanced by training trainers at established and relevant institutions (e.g., APN or a university) (Rao et al. 2014).

- This project had no component to influence the policy environment within APN to make IVUMF a more likely framework for adoption (Tomičević and Vuletić 2010). As Kohl (2024) argues, a holistic approach enables the entire context, so it would be advised to take this kind of approach in the future that does not focus only on students or participants but also on the policy and work environments that can promote or inhibit adoption of any new skills and knowledge that arise from trainings.

- Because of the importance of formal recognition and certifications for the professional development of Latin Americans, the training could be formalized to the point that it could issue certificates of participation or completion of a course recognized by the government as a future incentive for participation.

- While the project did work to produce examples in each of the focal parks, it could have invested much more heavily in one park to serve as a demonstration site rather than allocating more evenly but dispersed efforts across all sites (Lippitt and Finchum 2018).

- Given that development is a long-term process, to the degree possible, GWS and APN should seek additional support for the parks so that the initial investments are not lost. The availability of some implementation funding whether as part of this project or as a competitive grant by a third party could offer a significant incentive for parks to further develop and pursue their proposals, especially in a climate of political and financial uncertainty. The US Embassy in Buenos Aires expressed the possibility of promoting the adoption of this project and methodology to other countries thereby providing additional resources to develop it still further and to create an international community of practice with the methodology.

- The Interagency Visitor Use Management Council may help acquire funding to translate and adapt some of its materials to the Spanish-speaking community within the US and beyond.

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ENDNOTE

1. Readers can contact the authors if they desire to know more about the five parks/project areas indicators and thresholds.

REFERENCES


ALBOAN, Instituto de Derechos Humanos Pedro Arrupe, and Hegoa. N.d. La aventura de la sistematización: cómo mirar y aprender de nuestras prácticas desde nuestras prácticas. Bilbao, Basque Country, Spain: ALBOAN.


**SUGGESTED FUTURE READING**