Putting theory into practice.
The case of Joya de Cerén, El Salvador

Conservation Management Planning

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The Getty Conservation Institute
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Preface

For the last two decades, conservation management planning for heritage places has played a pivotal role in projects implemented by the Getty Conservation Institute. This extensive involvement has underscored the evolving nature of heritage management and its recognition as a field that continues to be responsive to different contexts and realities, reflecting a variety of methods and thought processes.

The GCI’s Maya Initiative Project (1999 – 2007) included the formulation of a management plan that could serve as a model for other sites with comparable conditions in the Maya region. The aim was also to contribute to the development of sustainable policies and practices for heritage conservation and management.

The prehispanic earthen architecture site of Joya de Cerén in El Salvador was selected for this purpose; the management plan for the site was completed in the summer of 2002 and presented to local and national authorities and stakeholders in El Salvador.

The Conservation Management Planning document summarizes experiences derived from putting theory into practice in the case of Joya de Cerén. It evidences the flexibility of the method used and critically reflects on the limitations and challenges faced throughout the implementation of the planning process. Through the examination of lessons learned, the document aims to highlight key matters to consider for the implementation of a sustainable and successful management planning effort.

The management plan for Joya de Cerén was prepared within the framework of a collaborative agreement between the Getty Conservation Institute and the Consejo Nacional para la Cultura y las Artes of El Salvador. The authors wish to specially thank all institutions and individuals that participated in a variety of ways in the development of the management plan. Without their contribution, the application of the model and its subsequent analysis would not have been possible.

We would also like to thank our numerous colleagues from the Getty Conservation Institute who offered invaluable comments during the preparation of this document. In particular, we would like to acknowledge Jennifer Carballo for her patience and generosity in reviewing the numerous drafts.
How to use this document


Chapter I introduces the reader to the archaeological site and the purpose of the document.

Chapter II discusses the planning process implemented at Joya de Cerén considering the planning phases carried out; the issues pertaining to human resources and collaboration, information and documentation and planning tools. It also reviews how specific conditions at the site and the country influenced the planning process and presents the conclusions of the specific case. Throughout the chapter, there are several references made to appendixes which provide further details and/or are complementary to specific issues or themes.

Chapter III analyzes how the model was adapted to the specific conditions at Joya de Cerén and how the components of the planning method were modified in response to them. The different flowcharts created to illustrate these adaptations are included in the chapter.

Chapter IV presents thoughts regarding the conservation management planning process, particularly in regard to project design, the conditions for implementing the process and the application of the process itself. Although it analyzes points pertaining to the case of Joya de Cerén, several boxes have been included in the chapter to provide methodological considerations applicable to other heritage sites.

Chapter V expounds on the conclusions of the previous chapters and presents revised methodological schemes for the management of heritage places.

A glossary compiled from different sources is included at the end of the document.
I. Introduction
The archaeological site of Joya de Cerén in El Salvador is an exceptional window into the past. Buried by a volcanic eruption in the sixth century, the earthen architecture remains and artifacts of this Classic period village have been remarkably preserved. Perhaps no other place illustrates so well continuity in ways of life. Many of the features that characterize small agricultural communities in Central America today, from cookware to plants and fibers, can be found at Joya de Cerén, frozen in time. This site, linking the past with the present, has become a symbol of identity for local populations and for El Salvador in general. The site’s significance and unique features led to its inscription in the World Heritage List in 1993, recognizing its relevance to the world but also implying important responsibilities for the country, among them the development of a management plan for the site.
The archaeological site of Joya de Cerén is located to the northwest of the city of San Salvador, in the Zapotitán Valley, part of the Municipality of San Juan Opico, Department of La Libertad. The rich biodiversity in the area has attracted mankind ever since the prehispanic era, through the colonial period, and even in modern times. The area also reflects catastrophic volcanic activity and its contradictory effects: in the short term, huge eruptions have devastated the area, but in the long term, the decomposition of volcanic ash creates the most fertile soil found in the country.

Joya de Cerén was inhabited for almost a century, before being abandoned when the Caldera volcano erupted. Since 1976, with the site’s discovery and related research, archaeological structures have been uncovered, and a great number of domestic and ritual artifacts have been retrieved.

Today, the site encompasses an area of five hectares and is divided into two major sectors: the restricted area or archaeological reserve, and the public area or archaeological park.

Over five seasons of research, eighteen structures have been identified, ten of which have been completely uncovered, in Complexes A, B, C, and D. The archaeological exploration has been accompanied by conservation work, including structural stabilization and the construction of a system of protective shelters.

In 1998, within the framework of its Maya Initiative, the Getty Conservation Institute (GCI) began a collaborative project at Joya de Cerén with the Consejo Nacional para la Cultura y el Arte (Concultura), El Salvador’s primary governmental agency for the conservation of cultural heritage. The Maya Initiative had a regional focus and concentrated on implementing projects which were of common interest to countries in the Maya area, to advance methods and processes for the holistic conservation of cultural heritage. As with other GCI field projects, the Initiative was not centered on specific interventions but rather on the development of models and the implementation of methodologies that promote feasible and comprehensive alternatives for heritage conservation.

In the case of El Salvador, the partner institutions agreed to establish a management plan for Joya de Cerén that could serve as a model for other sites and that could also, in the future, promote the development of sustainable policies and practices for heritage conservation in El Salvador and other archaeological sites in the region. The conservation management planning methodology was based on prior work at the GCI, and the implementation of the process was documented. Under the leadership of the GCI team, the project sought to create conditions for the transfer of knowledge and capacity building at the local level that could support the undertaking of similar planning projects in the future. Therefore, the project had the active participation of Concultura’s professionals. Also, given that in the case of Joya de Cerén the conservation of archaeological remains posed a significant challenge, the GCI carried out scientific research to understand deterioration mechanisms and to establish feasible alternatives for the conservation of the remains and the presentation of the site.

As a result of the association between these two institutions, as well as the collaboration, participation and commitment of diverse social groups and government entities during the planning process, there is now a Management Plan for Joya de Cerén. The conservation of the site’s values and significance is the driving force for decisions regarding its management, with a vision that integrates cultural and natural heritage with sustainable human development. The plan serves also as a tool to articulate and foster collaborative endeavors between allied institutions that play a role in the conservation and management of the archaeological site and its surroundings. The Management Plan for Joya de Cerén, El Salvador is available on line from http://getty.edu/conservation/publications/pdf_publications/joya_sp.html
The model has set the basis for the process to be applied at various sites since the methodology can be easily adapted to other conservation management contexts. Also, the experience and technical capacities built during the collaborative process can promote the implementation of similar initiatives throughout the country.

The management plan is not only the first management plan for a cultural site developed in El Salvador, and therefore important for the country, it is also an example for other cultural places and World Heritage sites in the region. The applied model and the planning process contribute to consolidate holistic conservation management practices and to generate a body of knowledge for the field of planning in cultural heritage. Furthermore, evaluation of the results of the process and its comparison with similar practices will continue to add to the development of planning models.

The archaeological remains, preserved by the catastrophic events, are located within deep excavation pits where the successive layers of volcanic tephra can still be appreciated. Many features of contemporary agricultural communities in Central America, such as pottery making and crop cultivation, can be found at the archaeological site as though frozen in time, Cerén providing evidence of continuity and strengthening local cultural identity.
II. The Joya de Cerén planning process
The management planning process at Joya de Cerén started in March 1999 and ended with the presentation of the plan in July 2002. There were nine field campaigns in El Salvador, during which the GCI’s leading team collaborated with professionals from Concultura to develop the process and implement the plan. Between field campaigns, several tasks were undertaken by the core team, both in El Salvador and in Los Angeles, California, as work was needed or in preparation for the subsequent campaign. The following section summarizes each phase of the planning process in terms of its specific objectives, the work produced and the resulting conclusions. (In Appendix 1 a summary of the field campaigns can be found. For each campaign the objectives, the work completed and the conditions that influenced the planning process can be found).
1. Planning phases

a. Preparation of the project

Working sessions were carried out at the GCI prior to beginning fieldwork in El Salvador. These focused on adapting existing methodology and defining strategies for the successful implementation of the planning process, by considering the conditions necessary for its development and capacity building needs. Several reference documents were produced, including a process flow chart, terminology to be discussed, profiles for planning team members, and the work plan.

During the first field campaign, initial tasks focused on integrating the planning team based on available expertise and defined responsibilities. Given that there had been a previous planning initiative, there was a certain reluctance to begin another process because the prior experience did not yield satisfactory results. In 1997, Concultura, with financial and technical support from UNESCO, started working on the development of a management plan. Documentation regarding the site was compiled by Concultura staff, and preliminary results were discussed at an international seminar of experts to establish guidelines and criteria for managing the site. However, this planning initiative was not completed.

Therefore, when the new planning methodology was presented, it was important to analyze the differences between prior processes and the value-driven approach advocated by the GCI. It also meant that longer time was needed to imbed the value-driven participatory philosophy and to create conditions for its successful implementation. Throughout the development of the process, the planning methodology was constantly revisited to indicate the specific status of the process and to emphasize the critical links between different components and phases, so as to guarantee capacity building.

b. Study and documentation

Prior to undertaking the specific tasks of the planning process, the available body of documentation was evaluated in terms of what already existed, what needed to be updated, and what needed to be produced. Gaps in information and problems with the documentation were identified. For example, condition assessments for the structures and the archaeological site were not comprehensive enough, information about the site was too generalized, and much of the data was not accurate or well-organized. Working groups and mechanisms for collaboration were developed to address study and documentation tasks, which were defined based on these gaps and according to specific objectives.

The phase took longer than initially planned for several reasons. Limited progress was made between campaigns due to lack of time, as most of the participating professionals were actively involved in different activities at Concultura and often felt pressure to work on other projects that had
II. The Joya de Cerén planning process / 1. Planning phases

Planning process for the development of the Management Plan for Joya de Cerén

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been prioritized at the political level. Also, much information did not exist or could not be obtained. Additional expertise was needed to address the lack of information on specific aspects of the site, and because personnel were insufficient or not adequately qualified. There was also a lack of equipment, logistical support, and transportation to site.

To address these issues several actions were taken. A mission was carried out in Boulder, Colorado, where most of the archaeological records were kept, to obtain missing information. Small working groups were defined, according to specific themes or areas of knowledge, and additional expertise was provided by outside consultants to facilitate the completion of tasks.

Ultimately, this led to setting new milestones in the work plan, since the study and documentation phase needed to be completed, organized and synthesized for subsequent phases. Because of the importance of capacity building, the critical relationship that exists between documentation (written and graphic), analysis, and response was strongly emphasized in all phases, to avoid acting without a long-term vision or making decisions without sufficient information, as had been the case in the past.

Because several other projects that had an important impact on the site were running concurrently with the planning initiative, a significant part of the campaigns was spent in analyzing those projects and developing proposals to incorporate site management within them. This work involved coordinating with the agency in charge of the Development Plan for the San Andrés Valley (OPES) and reviewing projects to be undertaken by the Tourism Agency (Corsatur) as part of the framework of the Mundo Maya project, including the building of a new museum.

c. Analysis

Upon finalizing the documentation phase and synthesizing the resulting information, the next campaigns focused on its analysis. During this phase, stronger participatory conditions were created, to bring into the discussion the perspectives and
Stakeholders Meeting

The two-day meeting took place in August 2000 and marked a critical point for strengthening the participatory process. Over 150 people attended, including community members, representatives from government agencies and other entities, to debate ideas about the site, its values and their interests in Joya de Cerén. The main objective of the meeting was to contrast defined values with others ascribed by the interest groups, in order to understand how different elements were prioritized when defining the course of action. Debates were organized under six main themes: scientific research, territorial development, infrastructure and services, tourism, education, and legislation and management. Results of the discussions include:

- Definition and prioritization of values;
- Recognition of the direct and indirect impact of diverse actions implemented in the site’s surroundings and their relation to heritage conservation;
- Acceptance that the site does not exist in isolation but is embedded in a dynamic physical and human landscape which is impacted by factors such as industrial development, urban encroachment, tourism, etc.
- Identification of potential benefits of heritage conservation, from economics to human development.
- Establishment of a reference framework for the plan: definition of a collective vision and outline of policies for future interventions at the site and its surroundings.
- Definition of collaborative mechanisms to foster concerted actions between the public and private sectors to attain larger commitment and participation in heritage endeavors.

Therefore, the meeting was essential to discuss values and interpretations of the site, and to provide visions for its future. The use of external moderators, in guided discussions, allowed for the development of new spokespersons between government agencies and organized social groups, and fostered an open atmosphere for analysis.

A milestone during the analysis phase was the stakeholders meeting, which included representatives from interest groups ranging from the adjacent communities to delegates from allied institutions. Significant efforts went into preparing the meeting. First, the results of the documentation phase were synthesized so that they could be presented in a way that was understandable to all involved.

- The values and significance of Joya de Cerén and the impact of interventions: The documentation phase allowed for the identification of how interventions had altered some of the character-defining features of the site, even compromising their integrity and authenticity in some cases. This issue was explored to define a better course of action.
- Analysis of all projects either proposed for or carried out at Joya de Cerén and its surroundings: The impact that existing projects could have on the place was discussed at different levels, i.e. among the planning team, with the municipality, and in broad stakeholders meetings. These initiatives were analyzed for their relevance, and the need to articulate them with proposals for managing the site was assessed, while identifying means for inter-institutional collaboration and coordination among implementing agencies.
- Analysis of scenarios: Discussions centered on how conditions at the site could change if the management plan was not finalized, or defined without the consensus of different stakeholders. Preliminary evaluation of conservation actions at the site: «Criteria» behind the applications were analyzed, as well as the importance of each intervention for the conservation of building materials and their potential impact on the ascribed values. This analysis was important in recognizing the need to regulate and, where necessary, stop specific interventions at the site.
- Discussion of experts meeting: The relevance of the meeting for assessing decay mechanisms, identifying and analyzing building materials, and defining a monitoring and sampling plan was discussed. It was also discussed how the integration of additional expertise had implications on the manner in which the condition assessment was carried out and determined the need for further analysis.

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A milestone during the analysis phase was the stakeholders meeting, which included representatives from interest groups ranging from the adjacent communities to delegates from allied institutions. Significant efforts went into preparing the meeting. First, the results of the documentation phase were synthesized so that they could be presented in a way that was understandable to all involved.
Second, preparatory meetings were held with coordinators and moderators of specific working groups to define guiding questions and other facilitation methods. Last, but not least, visits were made to the Municipality of San Juan Opico to invite members of its communities and promote participation in the meeting.

As a result of the stakeholders meeting, values were ascribed and prioritized, an initial vision for the site was defined and specific proposals were developed by interest groups. (*Appendix 6 presents in detail the stakeholders meeting, including the preparation for the meeting, the specifics of working sessions and the results obtained.*)

For the planning team, the meeting resulted in a larger appropriation and embracing of the planning process, and conclusions were derived from the correlation of issues, such as impacts on values from interventions, the understanding of an integrated vision, how working on emergency basis affects heritage management and conservation, etc. There was also a stronger recognition of the importance of collaboration, although conflicts still arose in promoting broad participation for the joint development of the plan.

d. Response
Based on the results of the analysis phase, subsequent campaigns focused on structuring the response, i.e. the management plan for the site. A combined set of priorities was derived through the integration of assessments, and correlated to issues identified by interest groups. Similarly, the established policies and vision were revised to ensure articulation with the newly proposed strategies.

Because of the particular context of El Salvador, it was decided that the strategies needed to be translated into specific proposals for action to guarantee their feasible implementation. To that effect, detailed formats were defined and consensus was reached on the contents for each project. According to areas of expertise, smaller groups worked on defining the contents of each project. However, the planning team constantly met to evaluate each proposal to be included in the plan and to corroborate their correspondence with the defined vision and general objectives, but also to identify potential areas of conflict. Because of the availability of personnel and their commitments to other institutional projects, writing the detailed proposals took considerable time. In the end, only one small working group focused on producing the response, by reviewing all the components of the management plan for its completion.
Given the importance of a participatory approach, not only for planning but also for implementation, there was constant strengthening throughout this phase of collaboration and coordination between allied entities and involved interest groups. This mainly took the form of joint working sessions to define projects and their contents. For example, adjacent communities and the Municipality were involved in the definition of proposals for immediate improvements and additional tourism routes. However, the limited follow-up by the planning team between campaigns entailed significant work to recapture collaboration efforts.

**e. Presentation of the management plan**

The management plan for Joya de Cerén was presented in July 2002. As with the stakeholders meeting, significant preparation went into the presentation, given that its purpose was two-fold: to present the plan and to promote collaboration for its implementation by inviting key stakeholders that had been involved in its development. Participants at the presentation were provided with a brochure that summarized the contents of the plan and a dossier containing background information on the planning process.

The presentation of the plan was endorsed by the Vice-President of the Republic of El Salvador. After the meeting, the Mayor of San Juan Opico, as well as other representatives from the political arena, expressed their optimism about future collaborations and suggested several means of coordination, including using existing ones, such as the committees for the San Andrés Territorial Development Plan or creating technical working groups to monitor implementation of the plan.

To distribute the plan and make it readily available, it was decided to print only a limited number of copies but attain larger distribution digitally, including posting the plan on the Internet.

**2. Human resources and collaboration**

*The* collaborative agreement between the GCI and Concultura set forth the goals of the project and the roles and responsibilities of each institution, as well as the expected outcome. To implement the agreement, both institutions had a project director or manager who jointly defined a work plan with actions and phases that were subsequently adapted as needed with regard to timelines. The means to implement the planning process, the documentation of specific issues and the technical needs to accomplish goals were determined with other collaborators.
A leading team was established to define how the model was to be applied and to build the strategies for successful implementation and capacity building. Professionals in this team had expertise in the theory and practice of conservation management planning and also experience in the region. They assumed the direction and implementation of the planning process, defined how to accomplish results, how to structure the working teams, and how to facilitate the process as the main spokespersons with participating interest groups. They were also responsible for defining the project phases and their contents, the logical sequence of the process, the preparation of documentation and reference materials, and the coordination of components. They also defined the technical needs for accomplishing the main goals of the process: to develop a model plan, and to implement, document and disseminate the planning process.

In collaboration with the partner institution, professionals were selected for the core team. Their role was to provide input at the local level in regard to: training and documentation needs, the means to accomplish goals, and to facilitate the planning process. The selection of the core team members was important, as they needed to identify and interact on different levels of collaboration, coordinate the activities of different professionals, identify the weaknesses and strengths in the planning team, as well as adapt work roles and responsibilities according to the requisites of the project and the development of each phase. The core team also identified issues of concern that would need to be addressed in timely manner so as not to hinder the development of the process. This led to adjustments in the work plan in terms of time, as some campaigns were longer or phases were extended, but content and expected results were not to be compromised.

Finally, local professionals with different areas of expertise were identified to constitute the planning team. For their selection, several parameters were considered: the objectives of the project, the nature of an earthen architecture site in a wet tropical environment and the expertise required, prior planning initiatives and work undertaken, and institutional needs for capacity building. (In Appendix 2 the specific functions and responsibilities of the professionals in the Planning Team are presented.)

Given that in the case of Joya the process was initiated by a government agency, most of the participating professionals worked on a permanent basis at various government institutions. However, additional expertise was brought into the process in response to specific conditions that needed to be addressed, particularly with regard to the conservation component of the plan. As the planning phases evolved, other local sources at the national level were also integrated, such as universities, allied government agencies or professionals contracted from the private sector.

During the planning process, collaboration existed at different levels. In the political arena, organized civil groups and institutions with mandates that impact the site and its surroundings were brought into the process to reconcile different agendas and promote their active involvement in heritage conservation.

On a technical level, professionals from the planning team interacted with colleagues in allied entities, including universities, ministries, non-government organizations, organized social groups and members of the local communities, to carry out their specific tasks.
The reality of implementing a planning process entailed several factors that affected how effective human resources and collaboration can be. In the case of Joya de Cerén, initially there was confidence in group participation and in the "ease" of applying a method particularly because the required fields of expertise were there to some extent and there had been prior planning initiatives.

However, the planning team members were also committed to other institutional responsibilities, leading to situations that hindered the development of the project: continuous interruptions due to workloads, little concentration on finalizing tasks, limited commitment to the process, personal interests that were detrimental to the project, to the site and to the institution, etc. Since teamwork was not predominant in their activities, professionals tended to work in an isolated manner, with moderate communication among them or with others in allied institutions. Most importantly, the team was not empowered with a certain degree of autonomy to respond to the needs of the process.

To alleviate problems of information exchange, lack of communication and duplication of efforts, a committee was created to manage the planning team and to promote teamwork both within Concultura and with colleagues in other entities. It also sought to communicate the activities of Concultura to the working groups, to integrate disarticulated aspects related to the site and to foster a less vertical, more informed decision-making structure. At first the committee addressed difficulties for the implementation of tasks, but later it became an obstacle for decision-making, with an almost bureaucratic structure that was used to minimize professional responsibility.

Finally, to address working conditions that were detrimental to the process, smaller groups were formed to address specific themes, and two supervisors were assigned to produce the content of those projects.

Additionally, local professional support was sought from outside the institution so that tasks could be accomplished.

In the political arena, cooperation among Concultura, the Municipality and other participating entities had to be built during the process. However, as aforementioned, limited communication and continuity in collaborative endeavors between meetings or workshops meant that attained rapport had to be rebuilt over and over, and the momentum was not used for the process in consideration of a future participatory implementation of the plan. Opportunities for collaboration and support lent by allied entities, both critical to the process, were misused because of the lack of proactive leadership, with precise responsibilities and roles that could effectively integrate them in the development of the plan. To a certain extent, the GCI was not effectively in a decision-making position regarding the site, and Concultura did not have the adequate technical expertise to comprehensively address certain issues. Even so, difficulties were overcome with diverse mechanisms to finalize the process and develop the plan.

3. Information and documentation

To begin the planning process, a preliminary review was done to analyze what information existed and what needed to be produced. Sources of written and graphic documentation included a bibliographic review, archaeological reports, a photogrammetric survey, records from the GCI (case study, mission reports, etc.), the World Heritage Nomination dossier as well as documentation, guidelines and conclusions produced by Concultura during the prior planning process. Based on
the level of existing information it was assumed that conditions and values were ready to be analyzed and that only a systematic condition recording campaign was needed.

However, there were several issues that led to adjusting the work plan and proposing a longer documentation phase, which were basically related to the following:

- The quality of existing written records was poor. Several documents had been produced without clear objectives and there had been no analytical effort to identify conflicts within them. There was no joint work or interpretation of archaeological research and the level of documentation of prior projects was very poor. In terms of archaeology, there were no records of conditions prior to excavation, removed tephra layers, or conditions at time of discovery. The process and history of excavation had not been synthesized and the few existing records were not comprehensively referenced for their optimal use. During the archaeological investigations only a few floor plans were produced and there were no elevations or precise records of interventions or protective measures. For conservation, no systematic condition assessment had been carried out, nor had the interventions or expert mission recommendations and their implementation been analyzed.

- Manipulation of existing graphic documentation was difficult because of their format and the lack of systematization. Since the precise extension of the site was not known, existing plans for the site were inadequate, being limited to fragmented floor plans. Maps had no compatible scales and information was often contradictory. Existing photographic records were not systematically classified.

- There was no central repository of information, so documentation was not classified, actively used, or available to all involved personnel. The largest corpus of documentation exists in Colorado, where the lead archaeological research teams are based, so access to information in El Salvador was generally limited.

Because information had already been collected, it was difficult to convey the need for further documentation. Notwithstanding, the documentation phase was carried out, even though it entailed a significant amount of time and resources. Everything that existed was collected, systematically organized, and managed so that it would be accessible to team members. Records were analyzed to identify information needs both for the site and its context, and so that documentation could serve as an effective tool for the site.

Guidelines were produced for additional documentation that was needed, including objectives for producing each document and a structure for synthesizing the information. Potential sources of information included bibliographic references, reports, gray literature, anthropological research, visitor analysis and surveys, the review of statistical information on education and tourism, and the analysis of archaeological field season records. To understand the social context of the site, census data was used as well as anthropological studies examining the composition of social groups, economic and educational levels on the national, regional, and local levels, dossiers from development projects, and land use around the site, among others. (Appendix 7 presents in full the study and documentation phase implemented during the planning process including the tasks carried out and the description of results and cartographic information).

Likewise, a comprehensive condition assessment was carried out to understand decay mechanisms at the site and to propose feasible alternatives for intervention, in an attempt to address the main factors of decay, rather than its effects, as was the practice at the site. This assessment included condition recording, scientific research on building material properties, environmental monitoring and geological studies. For condition recording, visible deterioration effects were recorded on drawings and photographs so that there would be visually collected data to measure the rate and degree of decay during different seasons. A glossary was produced so records would be homogeneous.

Documentation for Joya now includes previous reports, published literature, maps, etc., which were analyzed; the results of new research and data collection; and information that was produced as part of the process. It includes written and graphic documents, particularly drawings and photographs which have all been organized in a system that allows for its active use and consultation by different professionals, and which optimally will serve in the future as an effective decision-making tool for the site.
4. Planning tools

For the documentation phase at Joya de Cerén, several tools were selected, based on the needs of the project but also as an investment for the future management of the site.

The basic types of support included: texts, graphics, cartography, photos, images, and audiovisuals (tapes, videos, etc.). In the case of Joya, it was decided that digital tools would be used for condition recording and architectural surveys. This entailed additional training in CAD for participating professionals and purchasing equipment, but it was justified because of the advantages it offered in manipulating images and information for the future. Also, from the onset of the project it was decided to develop documentation for a cartography system that would also be compatible with the ones that exist today for territorial development and planning.

The cartography system was an essential tool for analysis and for projection. It was based on different levels of documenting the site, from the macro scale to the structures at the site, and considered:

* Overall contexts: the country, and the geographical and geophysical contexts;

* Intermediate context: five kilometer radius from the Joya de Cerén site;
II. The Joya de Cerén planning process / 4. Planning tools

- **Immediate context:** one kilometer radius from the Joya de Cerén site;
- **Joya de Cerén site:** archaeological park and site;
- **Archaeological site:** excavation pits and structures.

The use of different scales allowed for the comprehensive assessment of the place, and the identification of interdependencies between projects and spheres of influence at the local, territorial and national levels. The mapping system was viewed not only as a tool for collecting information but also for synthesizing it, in order to plan for the future of the site and gauge changes, thus constituting a global system for the management of the site.

The main purpose of the cartography system was to map the place in relation to its physical and human environment, both in terms of present conditions and for the future management of the place.

It permitted the geographical identification of the heritage place and its relation to other important areas, and materialized the connections between the site and its context in regard to topography, geographical context, climate, geology, etc. It also mapped human aspects, such as land use, land tenure, and territorial development. It was used to evaluate potential risks from the macro context, by locating and analyzing potential pressures from site development, identifying and correlating the site with other areas of prospective interest, and mapping historical evolution and changes to the place. The cartography system was also used to plan future developments for the site. The maps and plans required for the project were produced according to defined scales, using a standard numbered scale from the beginning.
For the intermediate context, cadastral plans were scanned, and information collected from the field was recorded first on paper and then digitized. This same process was followed for the immediate context, although an aerial photograph was also used.

The existing photogrammetry plans and elevations of the site and structures had to be scanned because the original digital files had been lost. There were also technical problems, derived from prior recordings, which had to be corrected. These corrections entailed collecting data in the field and using CAD to make changes in the digital format. Only a partial topographic plan of the site existed, so it was decided to undertake a comprehensive survey using a total station, because additional cross sections were needed to show the actual archaeological levels. Due to the lack of precise reference points, there continue to be problems in the overlapping of some data. In 2002, GPS measurements were taken to complete the existing documentation, and there are now two additional aerial photographs and one satellite image.

The results were put into a format so that information could be further manipulated, in order to identify potential areas of conflict and to plan for the future. Therefore, a cartography system was an essential tool in identification, risk assessment and defining proposals. Creating maps at different scales allowed us to identify key decision-makers and reconcile their potential needs and expectations. It is an essential management instrument to precisely identify and articulate the different levels of responsibility for implementation, based on geographical representations that go from the site to the municipality to the territory to the country. It also promotes concerted actions among public and private sectors, thus avoiding duplication of efforts and implementation of disarticulated actions.

Photographs were selected from archaeological projects and scanned to record conditions, as well as document the excavation process, the history of the site and the changes in conservation conditions. As aforementioned, systematic photographic records were also used to document conditions at the park and its social and natural context. These are both in digital and printed formats. During the process, there was also professional recording of local school children, the town, fields, houses, current conditions, related sites, meeting with communities and involved personnel. Although new videos were not produced, existing ones were checked to verify conditions.
II. The Joya de Cerén planning process

4. Planning tools

Cartography

Cartography creates balanced and readable representations to communicate spatial information and to illustrate geographic phenomena effectively. In management planning, it refers to a mapping system that can be used to geographically identify a heritage place and its relationship with others, to visualize the connections between site and context in regard to topography, geographical conditions, climate and human issues, such as land use, land tenure and territorial development.

Mapping is a tool to record information to support the identification of a place, the assessment of potential risks and opportunities and the elaboration of proposals. The different scales that are used in the system support the identification of key stakeholders, the reconciling of needs and, most importantly, the definition of areas of responsibility according to spheres of action. It also plays an essential role in projecting the future of a place, and in anticipating and managing change.

A sound cartography system should be articulated with and draw upon information that exists for the specific context, such as:

- National cartographies
- Territorial management plans
- Cadastral plans
- Aerial photographs
- Satellite photographs
- Site topography
- Site and structure plans.

Resulting maps should be in a format that can be easily manipulated and updated for their use as a tool for managing a heritage place.
Once information on the needed written documentation was organized, it served as a reference for what needed to be produced.

Based on these needs and other specific objectives, a series of additional research activities were defined which included not only bibliographic research, consultation of climate and statistical tables, etc., but also the use of techniques such as interviews and surveys, for which specific formats to capture the information were developed. The resulting written records were illustrated with photographs, graphics and charts.

It is worth mentioning that the planning process was also recorded for future reference and for the analysis of its implementation. There are records of meetings, generated documents and discussions, processed texts, and digital photographs and slides. These materials also include reference documents produced in preparation for participatory meetings with diverse stakeholders, such as the Municipality and the Tourism Ministry. Notebooks with documentation from preceding campaigns were produced for almost every field campaign, not only for the purposes of capacity building and transfer of the process, but also as an essential record of the project and as a tool to get tasks accomplished.

Finally, different techniques and tools were used in the subsequent analysis and response phases of the planning process. These included structured brainstorming, problem analysis using “problems – causes – effects” trees and “SWOT” (Strengths, weaknesses, opportunities and threats) analysis, among others. To mediate discussions among the planning team, methods were applied to facilitate discussion and agree on a course of action. These consisted in listing alternative options to assist in their comparison, the development of logical frameworks, the definition of critical questions for structured brainstorming, and guided visioning. For participatory decision-making, especially during the definition of proposals and analysis, alternative methods employed included idea-listing to jumpstart discussions and working in small groups to explore different aspects of issues, build relationships, provide conditions that would encourage the participation of all representatives, and attain greater commitment to the product. Work in small groups was usually preceded by structured go-rounds to gather different perspectives and to get initial reactions to difficult issues. The use of these tools and methods during the process also contributed to capacity building, by providing the means for facilitating discussions with interest groups. (Appendix 8 describes the response phase of the planning process at Joya de Cerén, including the specifics for structuring the programs and projects and how they evolved during the different campaigns).

5. Specifics conditions at El Salvador

In the case of Joya de Cerén, several initiatives had been undertaken, prior to the GCI’s involvement, to develop a management plan. The reasons for why they had not succeeded in producing one were related to many factors, including the difficulty in promoting participatory planning in a context where there is no mandate to do so and decisions are mainly those of the primary agency in charge, there is limited technical capacity, political will, and institutional frameworks, among others.

However, it was assumed that conditions could be created to provoke change by investing time and resources in capacity building and empowerment. Partial results, attained as the process evolved, allowed for the establishment of confidence and situations to gradually implement the participatory value-driven model and to generate feasible planning conditions. Given the particular social and political context of El Salvador, where participatory decision-making is not widely promoted, several schemes had to be devised for the process to occur.

Local technical capacity also had an impact on why other initiatives had not succeeded, in large part due to limited critical analysis that curbed fruitful dialogues and capacity building when additional expertise was brought into the country. As such, requests for technical assistance were not continuous, they were frequently not integrated among different levels, results were not communicated to other involved actors in the conservation of the site, and the implementation of recommendations was not monitored, so these missions did not effectively contribute to advancing heritage practices.

An important aspect of the planning process at Joya de Cerén was the use of a significance-driven methodology. For cultural significance, the assessment needed to be as objective as possible and based on the broad understanding of the history and evolution of the place as well as its contemporary context. Significance is a relative concept; it can only be interpreted in relation to a frame of reference. It reflects the political, cultural and economic considerations of each group and is determined in a specific space and time.

Another important challenge faced in advancing the value-driven approach was working with ascribed rather than “intrinsic” values, which leads to an understanding of what heritage signifies to different social groups, not only from the
in institutional perspective, and the importance of participation under this framework. Some examples of how values were ascribed and prioritized during the process include:

• At the beginning of the process, scientific and historic values were prioritized for the response, but as other agendas from macro projects in the country were integrated, projects such as those focused on the landscape were included and played a larger role in reconciling the proposed actions. As a result of the stakeholders meetings, social values were largely prioritized because of the prevailing conditions of the country. This is reflected in the establishment of human development projects.

• Controlling research and exposure of new areas could mitigate conservation conditions. However, halting, comprehensively projecting or reconciling future archaeological research was difficult because of vested interests at the site and the significance of future excavations.

• Conservation priorities were balanced with expectations and agendas on the national and local levels so as to increase benefits to the long-term conservation of the site and avoid unplanned proposals that could prove detrimental to the site, its surroundings, and its future development; hence negotiating development was critical. (*In Appendix 3 the specific aspects of values, cultural significance and vision for Joya de Cerén are revised.*)

External projects also forced the rhythm of the plan. Investments, financial support, and other factors pressured the implementation of specific projects, even if they were proposed in complete disarticulation from the site or defined vision for the future. They were considered important only because of short-term benefits. Reconciling these isolated projects allowed for their integration in the overall management plan, tailored to common goals that would contribute to the established vision. The projects included those at the site level and also several within the macro context that could potentially have a large impact on the site, such as the Territorial Development Initiative for the San Andrés Valley and major infrastructure works like the periphery road system. (*These projects are revised in detail in Appendix 4 and Appendix 5.*)

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**Landscape and human development programs in the Joya de Cerén Management plan**

During the planning process at Joya de Cerén, it was decided that all projects that had an impact on the physical and cultural features in and around the archaeological site (except for the archaeological remains) would be grouped under the “Landscape Program”. It entailed identifying existing and/or potential initiatives for intervention that had not been previously incorporated into the site. It also responded to specific financing allotted by the Inter-American Development Bank for the “landscape proposal” for Joya de Cerén. Because of the specific conditions, dovetailing projects into this broad category allowed for a larger integration among different levels and aspects of the site, and also permitted the identification of interdependencies among diverse components.

On the other hand, a “Human Development Program” was structured to respond to the needs and concerns identified during the documentation phase and the stakeholders meeting and also to reconcile the needs and proposals of the Municipality and the existing territorial development project for the Valley of San Andrés. The final proposal recognizes communities as a main force in conservation actions but also promotes supporting their human development. The communities considered encompass not only those adjacent to the site but also others at the level of the Municipality, to balance the needs of the archaeological site with the development intentions for the complete Municipality.
In spite of this work, many alliances and shared efforts with potential collaborators were missed because of limited information, critical analysis or the incorporation of other entities into the planning process.

As for the response, programs of the Joya de Cerén Management Plan were developed to address current conditions and to achieve the vision established for the site. Each program is geared toward promoting or conserving specific values, with established and tailored guidelines for each particular case. Care was taken to ensure that future activities at the site will not compromise the ascribed values, for example, by changing the character of the place or its surroundings; nonetheless, these values are not considered static. The plan seeks an integral, sustained approach toward the challenges of conserving cultural heritage, and managing the natural environment and social conditions associated with the site. It also seeks to encourage collaborative endeavors between the public and private sectors involved with Joya de Cerén.

Different areas of attraction for visitors to the region: on the upper left, the archaeological site, on the upper right the town of San Juan Opico and the lower photo is of the archaeological site of San Andres. © J. Paul Getty Trust. Photos: Irene Sen, Lucia Valero, Carolina Castellanos
Joya de Cerén Management Plan

Diagram to illustrate how the management plan was structured, going from the understanding of the site and its values and current conditions, to the definition of vision and policies that serve as a framework for all actions prescribed in the management plan. Projects for implementation were grouped in four main programs: research, conservation, landscape and human development.
6. Conclusions

Technical capacity
In the case of Joya de Cerén, significant gaps in expertise in archaeology, conservation and other heritage fields existed at the national and local level. During the planning process it was not feasible to comprehensively address this issue beyond the limited training that was given, since it implied a strategic capacity building endeavor and education over the long-term that would necessarily entail the involvement of a higher education entity, such as a local university. Thus, the undertaken training, along with the other technical assistance projects, had limited effects in enhancing local capacities in the long-term, as it was mostly designed to solve specific problems. Attitudes toward these initiatives need to change so that they are complementary to existing efforts and a positive force that contributes to major goals.

An example of the attitudes toward technical assistance could be evidenced during the major earthquakes that occurred in 2001. Work undertaken by international relief agencies was not coordinated to have a larger impact, and, due to contradictory information, conflicts were generated among technical assistance agencies that had worked successfully in other places. In the case of damage to an 18th-century church in San Vicente, the GCI, UNESCO, INAH Mexico and at least five other missions went to assess the conditions of the site, yet in the end nothing occurred because efforts were not coordinated.

During the planning process, foreign archaeological missions at other sites in the area were not brought into the process, although the management approach could have been conveyed and enhanced practices at these places. Moreover, projects in development by the Inter-American Development Bank that had an impact on the site, such as the landscape proposal or the community workshops, were designed without taking into account the planning process for the site, which later made their integration difficult.

In terms of heritage expertise, theoretical knowledge conveyed in the few training opportunities that exist in the country have not integrated concepts and principles produced on the international level. There continues to be limited analysis of theory, and it is not correlated with the implemented practical actions. Similarly, the available body of knowledge is not effectively used for understanding problems; there is no research or critical analysis of causes and effects, and what is needed to understand processes and mechanisms to comprehensively address conditions. This is reflected by the lack of accumulated knowledge and capacity at the local level; frequently, successful experiences are just replicated without a thorough understanding of theory that would allow for its adaptation to local context. This is further evidenced by the little research occurring nationally, limited discussion forums among professionals, and the absence of common bases, libraries or central repositories of information.

Training opportunities outside the country are frequently misused and not recognized as the beginning of an education process; there is no time between training and assuming responsibilities, hence the continuity required to build up experience is limited.

Social and political structure
The existing social and institutional structure in El Salvador posed significant challenges for implementing a model based on broad participation. In the specific context, decision-making is a rather vertical process, with limited participation from organized social groups. Even if participation occurs, it is not sustained through time so that real changes occur. However, this is more evident at the national level than in day-to-day practice in the municipalities, where more continuity is achieved in projects, independently of changes in government and politics. Risks related to the surroundings of the site are only manageable if there is conscience and will at the local level, where the needs of the site can be balanced with those of the municipality and local realities. Municipalities collaborate to define better ways for sustainable growth in different sectors, including heritage, and in the process ascribe new values to the surroundings.

Cultural projects are particularly affected by the lack of continuity, and continue to be determined by political changes and agendas. In the case of Concultura, the entity does not operate at the ministerial level since it is under the Education Ministry, which provides different leverage in the political arena. Agendas need to be constantly managed so that effective political collaboration is created through strategic alliances on diverse levels. The political nature of heritage agencies results in many decision-makers being political appointees, without a background in heritage, which hinders the establishment of comprehensive cultural policies. The constant changes in institutions results in limited appropriation of work and of positions in institutions, which is detrimental to decision-making. Also, professionals are often awaiting an order to address emergency situations or volatile political agendas.
Challenges for the implementation of the plan

- Understanding the conditions in El Salvador is important for a feasible implementation of the plan. Given the recent history of the country, promoting cultural traditions and heritage plays a critical role in human development and identity on the local and national levels. In a country faced with economic and social challenges, heritage is essential for sustainable human development.

- A strong and committed team is needed for the implementation of the plan, to be able to continue with the participatory nature of the process and to translate collaboration into practical actions that contribute to the undertaking of the plan and accomplishment of the vision. Roles and responsibilities of the team should be clear, but there should also be a certain empowerment to make decisions within the existing structures, so as not to be overwhelmed by a bureaucratic process. At least one person should be at the site on a permanent basis to function as a liaison between people and projects, a physical link to the site and its surroundings. Work teams can be contracted for basic tasks with precise responsibilities, without creating a new bureaucracy. As proposed, the professional and technical structure should ensure personal growth, assuming responsibility and opening spaces for new generations, creating frameworks and recognition to foster the growth of experience and transfer to other sites. Working groups would dynamically use available opportunities and expertise, and would foster technical assistance as an opportunity for training and promoting relationships with universities or selected academic groups to enhance local capacity. Continuing with the interdisciplinary nature of the plan is important, and teamwork needs to be promoted through effective mechanisms and integrated common work. Professionals should educate themselves in other fields to create platforms for exchange and bases of knowledge to articulate understanding and foster interdisciplinary projects.

- Today, the difficulties encountered in undertaking the prescribed actions of the plan largely rest on the still inadequate collaboration channels and mechanisms. The core team is no longer in place, so now additional capacity building must be undertaken to connect the group that participated in the conceptual design of the plan to those now responsible for the practical implementation of activities. Guarantees for continuity need to be created so that there is effective capacity building, transfer of knowledge, education and a system in place that allows for other professionals to be trained.

- A system for control and administration of resources is needed to manage internal and external funds. Financial resources should be optimally managed and administered to sustain the system, but also used to seek additional sources of income to promote growth. The capacity to get funds and use existing resources in other places is important, particularly because economic conditions worldwide are limiting investments in heritage, so the management of financial resources needs to be integrated within larger agendas.

- Critical inner evaluation, which values attained knowledge and experiences and sets them within the context, is needed to monitor the implementation of the plan.

- Existing systematized documentation needs to be managed so that it is accessible and manipulated by various users. The corpus of information produced during the process should be continually updated according to the case. Different levels of activities have to be recorded, as well as changes to projects derived from monitoring or implementation, analyzing the results of study and documentation, and other impacts or implications to the plan. Advocacy is needed so that heritage becomes integrated into macro development or economy agendas. Managing a site is a mutual education process, where heritage professionals inform the public at large but also receive information of interest. Information kits should be produced to anticipate the needs of all users of the plan, including people in charge of the place, professionals from other participating agencies, funding agencies, etc. Materials can be pre-selected to respond to questions, and to better use opportunities to promote specific projects or the plan.
III. The planning model application and evolution at Joya de Cerén
III. The planning model application and evolution at Joya de Cerén

The model applied at Joya de Cerén was derived from evolving planning models on the international level and tailored by the Getty Conservation Institute in collaboration with several institutions for a variety of activities ranging from training programs to site conservation. Because the model is not a recipe, in the case of Joya de Cerén it was adapted as needed for its implementation in the specific context.

The principal premise of the methodology was that the objective for managing the archaeological site and its surrounding areas should be to conserve the values that make it distinct and significant, not only from the perspective of the specialist, but also from that of society as a whole. The decision-making process addressed issues involving research, conservation, and presentation, as well as infrastructure, services, and the development of the surrounding area. For that reason, participation from the various sectors interested in Joya de Cerén was critical.

The process was carried out in three major phases: study and documentation, analysis and response. These phases, respectively, included: site identification; an evaluation of site its conditions and cultural
significance; the establishment of policies and of a vision, and the development of programs and projects, with outlines for their implementation and the definition of indicators for their respective follow-up and evaluation.

A precise, participatory analysis of the site was key for being able to respond to current and future challenges at the site and its natural and cultural surroundings.

The specific conditions of Joya de Cerén, an earthen architecture site in a humid tropical zone, called for both field research and scientific laboratory studies to identify conservation problems in construction materials. A detailed record of the conditions of the structures was compiled, an analysis was made of the building systems and materials, and environmental conditions were monitored and recorded, in order to identify parameters and potential factors that could cause deterioration. There was also monitoring of interventions and maintenance activities, as well as activities for the prevention of emergencies. The advantages and disadvantages of each measure were evaluated, always from the perspective of conserving the values of Joya de Cerén.

The analysis of the site’s condition and the participatory evaluation of its cultural significance —what the site represents, and for whom— made it possible to develop a vision and to establish policies for action. This has constituted the foundation for defining the plan’s programs and specific projects.

Bearing in mind the complexity of managing Joya de Cerén and the various interests involved with the site, the strategies developed were aimed at identifying needs and proposing alternatives for each management component.

It is intended that the site be managed in a way that will create closer ties between the work of conserving both cultural and natural heritage, and integrate that heritage with society, serving as a foundation for the development of social groups.

Preliminary adaptations were critical to the development of the planning project, given that they considered prior planning initiatives at the site and were tailored to local conditions. In that way, a value-driven process was presented and was significant in terms of providing a different approach into how to develop comprehensive management strategies that seek to preserve the site’s cultural significance.

To define the required modifications, a series of steps were taken to analyze the specific conditions, by looking into who was promoting the planning initiative, the type of site to be managed, the administrative framework, the policies in place and the context of the site. Planning for the site entailed a continual conceptual and technical process during which flexibility and expertise was...
needed to adapt to changes as they occurred. The leading team analyzed these issues, considering the site but also building on prior planning experiences in similar contexts.

The planning methodology took into account two basic premises: the conservation of the values of a site and its surroundings are a critical component for sustainable human development, and participatory and holistic processes must be fostered when defining the management and future of a site.

Although several adaptations were made, the flexibility of the process allowed for adjustments during its implementation, but always followed a logical sequence of steps. Adaptations are best reflected in the flow charts, which served as a visual instrument for identifying key issues and interdependencies, locating the activities of the process and defining when to undertake specific actions, such as the stakeholders meeting. The flow charts (see pages 29-35) served also as “didactic” tools, in which categories were used to guide the discussions and to understand conceptual changes. Some of the adaptations made to the model and represented in the flow charts include:

• Physical evolution and historical evolution of the site were added as part of the site’s identification. These two factors were considered because what currently exists at a site is closely related to its evolution. «Identification of the site» provides the first elements for the cultural significance assessment and for the preliminary interpretation of the state of conservation. (See changes between February 1999 and March 1999)

• «Conditions» were changed for «setting», including natural and human context. Context refers to the group of components or issues that have an impact on a site; it is looked at holistically to incorporate all factors, both physical and social. However, management context is considered separately given that it is closely related to the actual administration of the site. In the Joya de Cerén process, the term “context” (the natural and human context) was changed further to natural and social “environment”, which had a different semantic connotation locally. (See changes between June 1999 and March 2000)

• The boxes used to outline the identification phase provide a frame of reference for understanding the “place”, its components, evolution, and correlation with the context, which includes physical and social factors that have an impact on the site.

• The specific terms to use and how to detail what issues to look at depend on each specific process. For example, in El Salvador, education plays a significant role in cultural identity issues so it was critical to look at education and awareness as an individual component. (See changes between August 2000 and July 2002)

• Categories of values for assessing cultural significance were consistent throughout the process, and included economic values (See chart March 1999). In the July 2002 flow chart, only cultural significance assessment in general is considered, given that how values are categorized is also variable and dependent on the specific planning context. Values were also “unlisted” so there was no implicit hierarchy. What is important is to not merely categorize values, but rather to understand the significance of a site as the series of features and characteristics that make that site important. The notion of significance is not only the sum of values but also a reconciled group of values that change over time and in specific social contexts.

• Physical conditions at the site also include prior interventions. These were incorporated as they have an implication on how values are ascribed and also affect issues such as authenticity and integrity (See chart from February)

• Evaluation of the site and context were initially put in one box but separated later on. At first, physical conditions were considered as closely related to the context. Although everything that occurs in the context has an implication on the site, context can be managed and, to some extent, moves separately from the physical conditions of the fabric. Context conditions can be separated from those that have a direct impact on the physical state of heritage from those that have an implication on the macro level and that might not necessarily have an impact on the state of conservation of the material. (See changes between August 2000 and August 2002)

• «Zoning and use» was considered as part of programming and not physical spaces for implementation (as might be the case in other processes), though several zones were defined for implementation of activities. (See changes between June 1999 and March 2000)

• «Programs»: It was decided not to assign specific fields of action or categories. As with values, the way in which fields of action are grouped or categorized is closely related to the type of site and its specific context, particularly in how
the site pertains to institutional mandates. It is better to talk about how actions on the site are going to be articulated rather than attempt to make them fit in one pre-established box. (These changes are illustrated in flowcharts from June 1999, March 2000 and July 2002).

- «Conditions» or «conditioning issues» (the term was changed for semantic purposes) are critical for the feasible implementation of the plan. It is the synthesis of prioritized issues, in correlation with policies, that allows for the definition of a precise and real vision for the future. To address conditioning issues, general strategies for implementation are defined, as well as within the projects and in relation to the vision and principles. (See Changes between March and August 2000)

- «Plan preparation» was removed, and «vision», linked to the principles and conditioning issues, became the main frame of reference. The vision was the key element that provided a reference for the articulation of components. It is the sum of implementing specific actions that constructs the future projections. Vision constitutes a gathering direction for all efforts; it is the tangibility of the future that goes beyond the philosophical connotations of policies, and a driving force to focus direction. It goes beyond the passiveness of analysis or observation to the actual implementation of actions on a place. (See changes between June 1999 and March 2000)

- «Definition of the plan» became the «management plan», which is the response phase of the process. This component is comprised of principles and policies, vision, programs, implementation phases and a structure for financial implementation. The response phase of the management plan has objectives and a clear sequence for how projects are to be implemented which might be articulated in different ways according to the specific planning process and context. (See changes between August 2000 and July 2002)

- «Temporary emergency actions», or what later became «action control», is an important addition to the process as a means to control deterioration or actions on the site and on structures during the planning process. It recognizes that some actions that occur at a place during the planning process cannot be stopped until there is further research and support (such as that derived from scientific research and monitoring). A planning process is not a slice in time nor does it happen in a vacuum; there are situations that need to be integrated and reconciled while they are already occurring. This box is also an attempt to stabilize situations and to provide elements for problem solving. However, it is important that these actions are clearly documented, including the criteria behind specific interventions, materials and processes used, and the precise location where they occurred. This is critical to define limits of acceptable change, to manage the risks entailed, and to determine actions that could prove detrimental to the site or compromise features that give value to the place. (See flowchart from March 1999)

- Boxes were moved and arrows were added to make the relationships between components more dynamic and to better articulate the interdependencies between phases. For example, arrows were used to indicate how monitoring and review not only impact the response but sometimes can also lead to reassessing conditions or even undertaking a new significance assessment. Box placement also marks how elements are combined.

- «Goals» was moved to show how the preliminary evaluation provides indications about what you want to achieve by managing the site, and the preliminary vision for the future, not only for the site but also for the use of the process. With the feasibility study, it also allows one to understand how to structure the planning team. Putting together a planning team is not only a technical issue but also has implications for undertaking a participatory process which is critical in establishing profiles for involved professionals who can effectively function as spokespersons at different phases of the process. (See changes between February and March 1999)

In the following pages the different flow charts produced throughout the implementation of the planning process at Joya de Cerén are presented.

In these, modifications are marked in red and additions are marked in blue. It should be noted that variations reflect conceptual changes, progress on the understanding of issues, responses to the specific context of the site or simple semantic changes to better adjust to the local language. In Appendix 1, there is a precise description of the campaigns, what the objectives of each were and the work accomplished.

The flowchart pertaining to July 2002 represents the synthesis of the lessons learned during the implementation of the planning process at the Joya de Cerén. It focuses more on the articulation of components and the sequence of the process rather than on specific contents.
III. The model: its application and evolution at Joya de Cerén

STUDY AND DOCUMENTATION

HERITAGE IDENTIFICATION
Description of the place and its components

IDENTIFICATION / DOCUMENTATION OF CONDITIONS
- Historical evolution
- Physical evolution
- Natural context
- Human context

ANALYSIS

ASSESSMENT OF CULTURAL SIGNIFICANCE
- Historic values
- Scientific values
- Esthetic values
- Social values

ASSESSMENT OF THE CONDITIONS AT THE SITE AND ITS CONTEXT
- State of conservation
- Previous interventions
- Research
- Environment
- Social situation
- Education / Dissemination
- Infrastructure and services
- Promotion
- Administration and management
- Legal framework

MANAGEMENT PLAN

IMPLEMENTATION PHASES
- Programs
- Specific objectives
- Strategies
- Requirements

GENERAL STRATEGIES

IMPLEMENTATION

VISION

EVALUATION / REVIEW

MONITORING

GOALS

DESIGN OF THE PLAN

Management planning process for Joya de Cerén, El Salvador
First Flow chart – February 1999
STUDY AND DOCUMENTATION

IDENTIFICATION OF THE PLACE
- Description of the place and its components
- Historical evolution
- Physical evolution

IDENTIFICATION OF THE SETTING
- Natural context: topography, hydrology, climate, seismic activity and ecosystems
- Human context:
  - Social situation
  - Awareness
  - Infrastructure
  - Tourism / promotion / services
  - Administration/management/ funding
  - Legal context

ASSESSMENT OF CULTURAL SIGNIFICANCE
- Historic values
- Scientific values
- Esthetic values
- Social values
- Economic values

ANALYSIS

GOALS

VISION

ASSESSMENT OF THE CONDITIONS AT THE SITE AND ITS CONTEXT
- State of conservation of the site
- Previous interventions
- Natural context
- Human context

Policies

PREPARATION OF THE PLAN

RESPONSE

IMPLEMENTATION PHASES
- Programs
- Research
  - Archaeology
  - Conservation
- Conservation of the site
  - Preventive
  - Curative
- Conservation of the natural setting
- Maintenance and monitoring
- Zoning and use
- Awareness and outreach
- Tourism / services / promotion
- Infrastructure and services
- Management
- Specific objectives
- Strategies
- Requirements

GENERAL STRATEGIES

EVALUATION / REVIEW

TEMPORARY EMERGENCY ACTIONS

Management planning process for Joya de Cerén, El Salvador
Flow chart – Revised March 1999
III. The model: its application and evolution at Joya de Cerén

PLANNING PROCESS for the development of Management Plans

STUDY AND DOCUMENTATION

IDENTIFICATION OF THE PLACE
- Description of the place and its components
- Historical evolution
- Physical evolution

IDENTIFICATION OF THE SETTING
- Contexto natural: topografía, hidrografía, clima, tectónica y ecosistemas
- Contexto humano: - Situación social - Sensibilización - Infraestructura - Turismo / promoción / servicios - Administración / gestión / financiamiento - Contexto legal

ANALYSIS

ASSESSMENT OF CULTURAL SIGNIFICANCE
- Historic values
- Scientific values
- Esthetic values
- Social values
- Economic values

ASSESSMENT OF THE CONDITIONS AT THE SITE AND ITS CONTEXT
- State of conservation of the site
- Previous interventions
- Natural context
- Human context

VISION

TEMPORARY EMERGENCY ACTIONS

PRINCIPLES

PREPARATION OF THE PLAN

RESPONSE

- Zoning and use
- Specific objectives
- Definition of the Programs
- Research
- Archaeology
- Conservation
- Conservation of the site
- Preventive
- Curative
- Maintenance and monitoring
- Conservation of the setting
- Natural
- Landscape
- Presentation
- Presentation of the site
- Awareness
- Tourism/services/promotion
- Infrastructure and services
- Management
- Implementation phases

EVALUATION / REVIEW

IMPLEMENTATION

MONITORING

Management planning process for Joya de Cerén, El Salvador
Flow chart – June 1999
Consevation Management Planning: putting theory into practice

PLANNING PROCESS for the development of Management Plans

**STUDY AND DOCUMENTATION**

- **IDENTIFICATION OF THE PLACE**
  - Description of the place and its components
  - Historical evolution
  - Physical evolution

- **IDENTIFICATION OF THE SETTING**
  - Natural environment: topography, hydrology, climate, seismic activities and ecosystems
  - Human environment: communities, land use, public use, dissemination
  - Management: administration, legislation, funding

**ANALYSIS**

- **ASSESSMENT OF CULTURAL SIGNIFICANCE**
  - Historic values
  - Scientific values
  - Esthetic values
  - Social values
  - Economic values

- **ASSESSMENT OF THE CONDITIONS AT THE SITE AND ITS CONTEXT**
  - State of conservation of the site
  - Previous interventions
  - Natural environment
  - Human environment

**RESPONSE**

- **PLAN DEFINITION**
  - Development of the programs
  - Research
  - Conservation of the place
  - Conservation of the setting
  - Presentation of the place
  - Infrastructure and services
  - Implementation phases
  - Investment structure
  - Collaboration mechanisms

- **V S I O N**
  - Positive and negative conditioning issues

- **PREVENTIVE ACTIONS**
  - Maintenance
  - Control of decay
  - Emergency

- **E V A L U A T I O N / R E V I E W**

**GENERAL STRATEGIES**

**IMPLEMENTATION / MONITORING**

*Management planning process for Joya de Cerén, El Salvador
Flow chart – March 2000*
III. The model: its application and evolution at Joya de Cerén

PLANNING PROCESS for the development of Management Plans

**STUDY AND DOCUMENTATION**

- **IDENTIFICATION OF THE PLACE**
  - Description of the place and its components
  - Historical evolution
  - Physical evolution

- **IDENTIFICATION OF THE SETTING**
  - Natural environment: topography, hydrology, climate, seismic activities and ecosystems.
  - Human environment: communities, land use, public use, dissemination
  - Management: administration, legislation, funding

**ANALYSIS**

- **ASSESSMENT OF CULTURAL SIGNIFICANCE**
  - Historic values
  - Scientific values
  - Esthetic values
  - Social values
  - Economic values

- **ASSESSMENT OF THE CONDITIONS AT THE SITE AND ITS CONTEXT**
  - State of conservation of the site
  - Previous interventions
  - Natural environment
  - Human environment

**RESPONSE**

- **PLAN DEFINITION**
  - Development of the programs
    - Research
    - Conservation of the place
    - Conservation of the setting
    - Presentation of the place
    - Infrastructure and services
    - Implementation phases
      - Financing structure

- **GENERAL STRATEGIES**

- **EVALUATION / REVIEW**

**TEAM INTEGRATION**

**GOALS**

**ACTION CONTROL**

- At the site
  - Maintenance
  - Operational on the structures
  - Specific
  - Periodic
  - Emergency Prevention

**VISION**

**PRINCIPLES**

**IMPLEMENTATION**

**MONITORING**

Management planning process for Joya de Cerén, El Salvador
Flow chart – August 2000
PLANNING PROCESS for the development of Management Plan for Joya de Cerén

**STUDY AND DOCUMENTATION**

**IDENTIFICATION OF THE PLACE**
- Description of the place and its components
- Historical evolution
- Physical evolution

**IDENTIFICATION OF THE SETTING**
- **Natural environment:** topography, hydrology, climate, tectonics and ecosystems
- **Human environment:** communities, land use, public use, education, dissemination and outreach
- **Management:** administration, legislation, funding

**Team Integration**

**Definition of Goals**

**ANALYSIS**

**ASSESSMENT OF CULTURAL SIGNIFICANCE**

**ASSESSMENT OF SITE CONDITIONS**

**ASSESSMENT OF CONTEXT**

**CONTROL OF ACTIVITIES**
- **At the site:** maintenance and operational actions
- **On the structures:** specific and periodic intervention and maintenance
- **Emergency prevention**

**RESPONSE**

**POLICES**

**VISION**

**CONDITIONING ISSUES**

**MANAGEMENT PLAN**
- Development of programs
- Implementation phases
- Financing structure
- General strategies

**EVALUATION / REVIEW**

**IMPLEMENTATION**

**MONITORING**

*Management planning process for Joya de Cerén, El Salvador
Flow chart – July 2002*
III. The model: its application and evolution at Joya de Cerén

Change of archaeological structures over time. On the left, excavation process of Structure 3 where the strata of the volcanic eruption are clearly visible and the features are precisely defined. Photo courtesy of Payson Sheets. On the upper right, structure 2 after conservation interventions including the replacement of the wooden bahareque grid and the consolidation of the tephra banks. © J. Paul Getty Trust. Photo: Evin Erder. On the lower right, structure 3 where the dry and rugged aspect of the construction material can be appreciated compared to the smoothness of the recently excavated materials of Structure 3. © J. Paul Getty Trust. Photo: Francoise Descamps
IV. Considerations regarding the planning process
IV. Considerations regarding the planning process

The case of Joya de Cerén provided an important opportunity to apply the value-driven participatory process advocated by the GCI. The specific conditions of the place and its social realities are significant for the understanding of the particularities of the model and the adaptations that occur in a particular cultural, social and political context. The experience is a useful tool for reference and comparison of the circumstances that influence the success or failure of planning projects, and has provided lessons to advance heritage practices.

The dynamic nature of management planning and value-driven conservation needs to be considered so as to adjust decisions to ever-changing social realities and as new sets of values are ascribed. Though the model itself is useful for other heritage sites, it is critical to think about the expertise and capacities, as well as the thorough understanding of the process, that are required to manage change and make adaptations according to the specifics of each context, and as the process evolves.

The site and its specificity: general view of structure 4 where the depth of the excavation pits and their unique conditions can be evidenced. © J. Paul Getty Trust. Photo: Irene Sen
1. Project design

**Context**

**Note** every context lends itself to participatory processes, particularly where top-down decision making dynamics exist. It is also important to differentiate between consultation and participation and decide which approach might be more adequate to promote the active involvement of diverse groups and to foster the interest of higher levels of authorities so that political support gets translated into effective action.

The momentum built during a process, by the dynamic and continuous nature of planning is important: the preparation of the plan is part of the implementation process because projects and common interest issues are identified, alliances are promoted and responsibilities are defined.

“Who” begins a management planning process, and why it is started are important. The reasons for planning could reflect the need to comply with particular state mandates or legal requirements, the need to access to specific funding, or just the result of long years of fruitless interventions. Consequently, orientations and expected outcomes can vary, and range from just a technical response to the conditions of the site to the development of policies for cultural heritage in a country.

For example, if an institution with no specific mandate for heritage planning begins the process, there might be an expectation to both apply the model and to contribute to other aspects, such as the development of participatory heritage policies or the creation of context specific models. For collaborative conservation endeavors to succeed over the long term, it is critical to motivate the participation of communities, social organizations, and municipal and national entities that have mandates or interests that impact heritage conservation and management during different parts of the process. Collaboration in different phases of the process, such as documentation and analysis, and opportunities referring to the site and its context, should be used to coordinate efforts and to foster the conservation and sustainable use of the site and its surroundings.

Another critical factor for the model is the role that heritage plays in a particular cultural, social and political context. The set of values that are prioritized by diverse social groups vary significantly and are related to the perception of heritage in the specific context. Reaching a consensus on how values are going to be conserved or promoted poses significant challenges, and many issues are at stake that require large efforts to reconcile. When such a model is implemented, the participating entities need not only be aware of the value-driven and participatory philosophy of the process but also embrace it for future decision-making. The plan and its implementation go beyond the undertaking of specific projects; it requires strategic thinking, understanding mechanisms and processes related to other institutions and national and international agendas, and promoting the preservation of values and significance. All actions and interventions at a site ultimately should contribute to further its understanding, both in terms of significance and conditions, through monitoring, evaluation and review, so as to build on the experience acquired.

The site and its specificity: contrast between the modern facilities built at the time of discovery and the presentation of the archaeological objects in the site museum. © J. Paul Getty Trust. Photo: Richard Ross
Pre-evaluation phase / feasibility study

Conditions that exist at a site and its context need to be clearly understood prior to undertaking a planning initiative so that adaptations to the process can be made. The following are some of the issues to consider in this phase:

- What type of site is to be managed?

- Is the process legally, politically, institutionally, economically and socio-culturally feasible?

- What are the human resources within the primary institution, allied government agencies and other entities, such as universities? What are the existing levels of training, the specific fields of expertise? Is there experience in conservation planning processes? What levels of responsibility and independence for decisions can be defined? Can continuity of involved professionals be guaranteed so that capacity building has a realistic impact on future heritage conservation and management endeavors?

- What financial resources can be committed to the process for its successful implementation? Is there a realistic commitment to planning for a place that might entail costs that vary according to the expected outcome and to the available staff and resources?

- What sort of basic preliminary information for the site exists according to the specific themes of the plan?

The results of this assessment allow the promoting entities to evaluate capacities, possibilities and feasibility of implementing a planning process, as well as define a preliminary timeline and costs for its undertaking and strategies for its successful development. What exists in the specific context defines the feasibility of applying a value-driven participatory model. However, if conditions at that point in time do not lend themselves to the implementation of a planning process, alternatives should be explored to improve conservation practices at a site and foster situations that would later lend themselves to subsequent planning according to the scope and conditions.
Alternatives when undertaking a planning process is not feasible

When administrative conditions or human or financial resources are not adequate for undertaking a participatory, value-driven process, possibilities exist to enhance conservation practices and to build conditions for future planning. Alternatives include:

- Capacity building through training;
- Using heritage projects as the starting point to further participatory, value-driven projects;
- Constructing collaboration through training and specific projects;
- Prioritizing preventive conservation actions, and accepting some interventions that are not detrimental to the site and which bring collaboration, knowledge and interest.

To implement these alternatives, it is critical to at least have a preliminary significance assessment of the site.

Feasibility studies

The planning process and challenges at Joya de Cerén highlighted the need for a pre-evaluation or feasibility phase. Issues to consider include legal, political, institutional, cultural and economic feasibility for the implementation; driving goals for the plan and for the process; available expertise; general conditions for implementation; and the means to control actions in and around the site during the process.
2. Conditions for implementing the process

Resources
A core decision-making team ought to be established to lead the development and implementation of the plan. The leading team develops and communicates technical actions and delegates responsibility for implementation, but should also allow a certain level of autonomy in day-to-day decisions. It needs to have the ability to articulate components of the plan, as well as manage collaboration and dialogue with diverse interest groups. Leadership should be able to generate conditions and manage projects that anticipate changes, sustain and foster collaboration and alliances, anticipate new situations and mechanisms for their attention, delegate technical implementation, seek consensus according to specific competencies of institutions on political and technical levels, evaluate competencies, roles, capacity and training on both technical and economic levels, and generate mechanisms to guarantee implementation. They need proactive and discerning vision, considering that the plan is not a static document and that project implementation requires critical analysis as new conditions and processes arise. They should also recognize the importance of communicating the plan to others, and seek spokespersons on different levels that are able to transform interests, agendas and personal visions into a shared dynamic that benefits the place and achieves set goals.

Participating professionals in the planning team need technical expertise and resources to successfully carry out each phase. When expertise is not readily available, capacity building or training opportunities should be considered and made accessible to guarantee the long-term success of implementing such a project.

Participating institutions need to commit human resources and prioritize the planning process in its annual activities so as not to extend the process for too long: the work load of institutional personnel is commonly too high to undertake additionally an active role in documentation, analysis and response, leading to major delays in the specific phases.
<table>
<thead>
<tr>
<th>Profile</th>
<th>Role / responsability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leading team</strong></td>
<td>Assumes direction, supervises and facilitates the planning process, defines phases, contents, and logical sequence of steps, prepares documentation and reference materials and verifies components. Provides theoretical guidelines and principles for the process. Functions as the main spokespersons between participating groups on technical and political levels. Delegates tasks to the core team as needed.</td>
</tr>
</tbody>
</table>
| * Has expertise in theory and practice of conservation management planning.  
* Can be an institution or entity with a heritage mandate or a group of professionals  
* If there is already a methodological approach in place, the lead team = core team | |
| **Core team** | Coordinates management planning activities, identifies weaknesses and strengths in planning team and adapts work roles and responsibilities. Continuity, autonomy and responsibility are essential characteristics of local leaders given that they are responsible for the elaboration of the plan, its promotion upon finalization and directing its implementation, monitoring and review as needed. They manage participation and collaboration from allied entities during the implementation of the plan. They delegate authority in specific fields for further communication among technical and political levels. The Core team is the same throughout the process, though levels of involvement might change as needed in each phase. |
| * Leading team + leaders from partner entity with expertise in the field and knowledge of local conditions.  
* Knowledge of policy and technical issues, including theory and practices of conservation and planning.  
* Authority for making decisions for the site, for requesting and articulating consultation, searching for and structuring advice, prioritizing actions based on information provided, pinpointing recommendations and correlating data to establish course of action. | |
| **Planning team** | Their main responsibilities lie in producing required documentation for each phase, analyzing it, developing appropriate responses, and proposing actions to implement specific components of the plan. Capacity building is centered on these professionals. |
| * Participating professionals with expertise according to the needs of the project. Ideally they should know about the site, have notions of heritage conservation and management and ought to be able to work in interdisciplinary teams.  
* Knowledge of theory and practice in their specific fields; main data providers for particular themes. | |
| Team is not the same throughout the phases; it can be expanded or limited as needed during each phase. | |
Considerations for implementing the process

Resources

Implementing a planning process entails committing human, material and financial resources. These usually come from the institutions or entities driving the initiative, but sometimes they need to be found in other places, as they are not available in-house. Additionally, during a planning process, external human resources might need to be contracted but decision-making should remain with the entities mandated with the conservation of the site. Financing needs to balance the costs of preparation and consider the implementation. Even though financing may come from outside institutions for specific components, there will always be a financial burden on the organizing institution.

Assessment of the resources for conservation and maintenance needs: periodic recording, monitoring and intervention © J. Paul Getty Trust. Photo: Irene Sen

To undertake a planning process under such a model, the required human, material and financial resources need to be precisely understood. Financing such a project needs to balance the costs of preparation and consider the implementation, as well as ensure that investments in capacity building are further utilized by guaranteeing stability and continuity of human resources within the implementation group. Even though financing could come from outside institutions for specific components of the process, there will always be a financial burden on the primary institution whether it concerns expertise, maintenance, etc.

It is also important to highlight the time a planning process will take. If too much time elapses between phases, the momentum and continuity is lost, and consequently the interest and credibility of the process is lost as well. In a climate of political change, support garnered for the process may also be lost.
Collaboration

Heritage management requires close collaboration among the most important agencies that have mandates and that directly or indirectly impact site conservation, such as development, environmental, tourism, and municipal agencies. It should be pointed out that a planning process is about participation, both within a team and with other interest groups, to bring into the debate groups that do not necessarily show an interest in the site or its conservation, but whose actions will nevertheless impact the site’s conservation.

Site managers and heritage agencies should be empowered to control actions that affect the place. At the same time, they should support other actions that will benefit it, or will contribute to the overall goal or role of heritage as a component of human development. This collaboration should occur on both the technical and political level. The constant interaction between them is critical: activities on the technical level supports develop knowledge, promote capacity development and fosters multidisciplinary approaches. Cooperation amongst the political level foster official endorsement and financial support for heritage conservation.

Frequent collaborations among these levels can be structured through key issue reports and records, prepared discussion themes, etc. Political intentions, derived from interaction among groups, need to be transformed into specific decisions for implementation on the technical level; otherwise opportunities are lost for heritage conservation.

For successful implementation, a larger interest in the planning process needs to be promoted among the higher levels of authority. Subsequent task implementation can be facilitated by a coordinated group, and in most cases there are mandates for collaboration in local legislation that can be enhanced through the precise definition of cultural and environmental policies.

The process entails shared decision-making to facilitate implementation and continuity in the process. While the process is occurring, it is important to focus on the articulation and coordination of components and shared responsibilities for implementation, rather than addressing bigger issues and deficiencies (such as conflicting mandates, lack of policies, etc.) that can be dealt with once there is a successful process with derived results in place. The situation differs from contexts in which such policies exist and where the application of the process is more mechanic, as opposed to contexts where the process itself will become the frame of reference for cultural policy development.
Heritage professionals and other interest groups need continuous dialogue for the joint critical analysis of information. There needs to be criteria for decision-making, in order to define acceptable change and deter detrimental practices. Though changes will occur, there are limits to what is acceptable so that values are not compromised. Though some actions can be reversed, decisions need to reflect the level of knowledge at the time, and be adaptable and flexible enough so that they can be evaluated in light of new information, or as contexts change. Under this framework, there will be a more credible process and stronger policies that will ultimately lead to a sustainable implementation through the appropriate management of change.

**Capacity building**

**Background** information and available expertise needs to be thoroughly evaluated and addressed prior to undertaking the process, even if it entails a preliminary training activity; otherwise it is time and resource consuming to take it up during the process itself. Capacity building is critical particularly for achieving the ultimate goal of advancing heritage conservation practices. Transfer of knowledge has direct implications for the process itself, given that it entails almost simultaneously training team members in the process, while lending expertise so that methodological approaches can be fully embraced and adapted as needed. For successful capacity building, participating professionals need to be committed not only to the process but also to the institution that may organize future initiatives. However, for a larger and long-term impact in heritage practices, successful transfer of knowledge needs to have the involvement of a university or upper-level educational entity.

Attitudes toward technical assistance also need to change, and recipients should understand that each opportunity is to be seen and used as an opportunity for building local capacities in the long term, not only for solving a specific problem. Technical missions ought to be complementary to existing efforts and a positive force that contributes to major goals.

*Managing pressures derived from tourism: the construction of the new museum infrastructure is not the first priority when artifacts have not been preserved. © J. Paul Getty Trust. Photos: Françoise Descamps, Carolina Castellanos*
3. Application of the process

Study and documentation

There need to be clear objectives within the documentation phase of the planning framework, in order to fill gaps in knowledge but also to have the foresight to know when additional information is critical for decision-making and interventions. Some issues might require the collection of more information; however this does not necessarily imply that better alternatives for interventions can be immediately provided as a result. During a planning process, actions continue at sites, so some decisions need to be made before the planning is complete, by analyzing the available information and deciding when it is possible to move forward with an awareness of the risks entailed. Information and recommendations need to be managed, and there needs to be a clear articulation between components to make informed decisions. An empirical approach may be taken when information is not sufficient, but these actions should only be considered in as much they can prove or invalidate hypotheses and contribute to a better understanding of the site. It is critical to precisely define limits of acceptable change for the structures, for the site and for its surroundings. These actions need to be limited and clearly documented.

Conceptualizing Documentation (Guiding criteria)

Documentation during a management planning process includes existing information and its analysis, what is researched, and what is created.

Information existing prior to the implementation of the process:

- Needs to be critically analyzed and interpreted;
- Completed as needed, not only for the purposes of the site plan but as a useful tool for the future;
- The evolution of the site and changes at the site need to be recorded as the implementation of the plan progresses.
- When documenting a site, one looks at past and present conditions and provides support to design projections for the future.

According to the specific purposes of documentation and plans for its future use, basic elements or criteria are defined for its production and manipulation, which defines the scale of the task. Notwithstanding the choice of tools, whether a manual or digital format, documentation implies the use of formats and systems that are consistent, of good quality and compatible with other existing systems at the local and national level. It is the base system for measuring and monitoring changes at the site and its surroundings, so it needs to be designed to adequately fulfill this purpose. Documentation can be progressive and the level of detail can vary according to each phase. It does not necessarily begin with the most complete or detailed levels. The level of documentation and its format, particularly in regard to time and use of produced documentation, are critical components to consider.
IV. Considerations regarding the planning process / 3. Application of the process

**Structuring Documentation (How to)**

- Select and conceptualize how information is to be organized.
- Collect, classify and systematize documentation;
- Define tools for collecting information according to the content and objectives, e.g. didactic material, recording material, presentation material, organizational material, etc.
- Decide on level of tool sophistication: basic or more elaborate. In both cases there needs to be physical organization and maintenance of varying degrees according to type. Chosen level of sophistication relates to:
  - Technical capacity;
  - What needs to be recorded;
  - Subsequent use of documentation to monitor and evaluate interventions;
  - Resources and how sustainable they will be;
  - Time and expected results.
- If a more elaborate level is chosen, criteria need to be compatible and require full-time personnel to manage and effectively manipulate them. Documentation should also be compatible with systems already developed or to be developed in the country.
- Establish a mapping system that is compatible with territorial development, management, or other means that consider the site within the region (existing or projected). Organize the system from the macro context to the site to details of structures. Level of detail can be decided upon as long as there is a good base; precision is more important than quantity because accuracy is critical for baseline documentation.

**Elaborating documentation: Condition recording**

Condition recording information is collected by different means. For example, visible deterioration effects can be recorded on photographs, drawings, charts, etc., all of which are tools for measuring changes. Information should be accompanied by a glossary so that results are homogeneous and understandable to others beyond the individual recorder.

Based on the collected information, a preliminary assessment can be done which in turn generates new questions, such as, what else needs to be collected or studied. The results from these studies (e.g. environmental monitoring, material analysis, geological studies) are then analyzed to prove hypotheses or to generate yet further questions. However, for the purposes of planning, analysis eventually needs to be put on hold or carefully monitored during the process, so that conservation strategies or intervention parameters can be defined, although it is recognized that additional research or monitoring may be needed to further understand decay mechanisms and effects. It is critical that condition recording does not become an end unto itself, but rather the means to achieve a comprehensive understanding of decay factors and processes.

**Critical Information**

- **Minimal cartography** (measured on a universal scale and based on reliable and recorded reference sources) that is required based on type of site and context:
  - Cadastral system (5 km radius) to map land use and land tenure;
  - Satellite photo to identify boundaries (existing and potential);
  - Topographic site map;
  - Site plans to define precise delimitation, boundaries, land tenure, location of visible remains and subsurface remains, location of infrastructure and services within the site and surroundings;
  - Floor plans, elevations and cross sections of known structures (it is better to have photographs in addition to elevations).
- **Background data**: to record timelines, periods of occupation, type of remains, key dates, preliminary interpretations, compilation of prior research and interventions.
- **Natural environment**: to record inventories and delimitation of protected areas within sphere of site.
- **Compilation** of legislation and institutional structures, functions, roles and competencies as defined by law.
Structuring the analysis

Analysis in conservation management planning has three components: cultural significance, condition and context. These three elements are the basis for the subsequent response phase, so it is essential that they be adequately developed. To structure the analysis it is important that:

- Information derived from study and documentation is systematized in graphic and descriptive ways to constitute a body of knowledge for appropriate evaluation.
- Interdisciplinary working groups are defined to address different portions of the analysis.
- Broad participation is promoted during each phase.
- For cultural significance, the assessment needs to be as objective as possible and based on the broad understanding of the history and evolution of a place as well as its contemporary context. Significance is a relative concept; it can only be interpreted in relation to a frame of reference. It reflects the political, cultural and economic considerations of each group and is determined in a specific space and time.
- Successful conditions assessments require broad participation from different specialists to identify decay processes and factors, and potential courses of action. It should distinguish which aspects of the site are particularly vulnerable to future physical changes and decay, and anticipate them before they occur. Condition assessment must be undertaken notwithstanding the options for treatment.
- Context assessment is critical for the implementation of the management plan. Elements that positively and negatively impact the place need to be looked at, considering both the natural and social environments, so that proposals are designed to comprehensively manage a place and create conditions for feasible plan implementation.

Subsequent assessment integration drives decision-making, ensuring that proposals respond to the values and varying conditions at a place, not to emergency interventions outside of integrated planning.

Analysis

Although significance plays an essential role in value-driven conservation management planning, to date guidelines for value assessments tend to be more conceptual than practical. However, progress is being made with recent research activities on the subject. Frequently, preliminary elements of value are derived from the documentation and interpretation of available information on sites. These elements are identified and correlated, even if it is just at the level of assumption, to set the basis for discussion with interest groups. These discussions serve to test the proposed values and assess the way in which they are prioritized by interest groups. The condition assessment and other analyses undertaken during the various phases of the process allow for the identification of further value elements that are then also categorized. It also allows one to elucidate how certain values have been compromised by interventions, and how their integrity or authenticity could be lost. This plays an essential role in how the response is articulated according to specific conditions. Ultimately, values are key elements in defining and balancing how different proposals can effectively conserve and promote significance. It is also important to consider that both the physical and social sciences play a critical role in the process, not only at the level of the site but also throughout its context. These four components cannot be disassociated because understanding their interrelation is essential during the analysis and developed response. In practice, it entails involving different fields of expertise and making them an integral part of planning. Therefore, planning team members should not be limited only to existing personnel in the main agency but should also include external collaborators such as consultants, international agencies, etc., who should all be part of the process, for better use of resources and opportunities. It is also important to analyze every aspect from different perspectives, from the site to the macro level.

Response

The model used also indicates the direct link between significance, analysis, and results. The advocated philosophy makes clear that all decisions have an implication on the values of the site, by conserving or promoting them, but also in terms of how they can be compromised depending on their prioritization and the prescribed actions. Decisions therefore need to be well-founded, documented and justified with regard to the specific context that led to the definition of precise policies and frameworks for action. Through prior analysis and broad consultancy, principles, acting parameters and intentions are derived so that interdependencies among projects can be identified.
The degree of detail presented in the final plan is also dependent on the specific planning context and the uses of the product. Each management plan has different objectives and an acting sequence for project implementation that can be articulated in a number of different ways. In a context where there is no institutional framework in place that would allow strategic decisions to be turned into a plan of action, then frequently general strategies would need to be detailed to a point where only slight revisions would be needed prior to implementation.

The rationale and criteria for how to structure the implementation phases are related to the conditions and technical, economic and material possibilities of each context. For example, at Joya de Cerén one of the main criteria for prioritizing actions in terms of conservation, and in consideration of the complexity of the issues at the site, was to improve practices while additional studies were being carried out. The criteria for structuring actions considered what could be undertaken immediately, including relatively simple and low-cost actions that were not detrimental to the future of the site and that would provide data if they were monitored and evaluated to prove or invalidate hypotheses.

Another important factor is that of cost and benefit, not only in regard to financial investments but also in accepting certain losses. A balance is needed between technical feasibility and the reality of a site and its context; this implies taking risks but through decisions that are as informed as possible.

Structuring the response

Response is the component of the planning process that varies the most in management plans in terms of format and detail, according to the type of heritage place, its needs, and the specific goals of the plan.

Notwithstanding, there a series of components that are critical in terms of content and that should be included in all management plans:

- A precise set of policies and a vision that serve as a reference from which to articulate all other components and that have a precise connection with the preceding assessment phase;

- A clear statement of management objectives that convert policies into specific, clear and measurable goals for attaining the vision in the short, medium and long term. They should reflect the prioritization of conditions to address and allow for the clear visualization of what is wanted from the management of the place;

- A practical plan that puts defined policies into practice, including technical, material and financial requirements and a timeline for implementation. Because of the holistic and participatory nature of planning, proposals are often not only limited to the fabric of places but also address other social and economic issues that influence the sense and meaning of heritage in the lives of different social groups, and make them direct beneficiaries of its conservation. Consequently, defining this component requires broad interdisciplinary collaboration and a close relationship with entities that will ultimately be responsible for or impacted by project implementation.

It is important to remember that a management plan is not only a tool for conserving the significance of a heritage place, but also for managing collaboration among different interest groups in the public and private sectors, to achieve larger commitment and participation in conservation endeavors.
V. Towards a heritage management approach
V. Towards a heritage management approach

Conserving and managing cultural heritage is a challenging task. Generally speaking, heritage professionals are faced with issues that can be categorized, perhaps in simplistic terms, in two broad areas: those related to the impact of natural processes on the material fabric, including climate change and environmental conditions, and those related to the social context, including aspects such as management capabilities, resources, governance, participatory approaches, integration of social and economic values, amongst others. Some of these can be considered worldwide trends but they are also reflective of local situations that are closely related and interdependent.
In spite of investments made at different levels, conditions at cultural heritage places continue to be dire in many sites across the world and having operational and consistent management systems in place have yet to be achieved. However, in the past years many new instruments and methodologies have become available. While not all of these new instruments are readily applicable to all heritage sites, the lessons learnt through their application can contribute to the development of a coherent approach toward the management of cultural heritage places.

Perhaps the most important lesson is that almost all process share similar underlying principles: understanding the heritage place, its context, its conditions and its significance so adequate responses can be defined. If the values of a heritage place are precisely understood and ascribed by a range of social actors, they can be balanced and prioritized to define clear courses of action to address not only existing situations but also to build towards a sustainable vision, where ideally change will be anticipated leading to a more proactive, rather than reactive, attitude towards heritage conservation and management. Although there will never be a single recipe, a one size fits all method, management of cultural heritage places should fall under a general framework, easily adaptable to be responsive to diverse typologies of cultural sites, management contexts, etc.

But there continue to be widespread challenges in setting in place effective management systems and in embracing the concept that management is not a linear process but rather a cycle. Likewise, attitudes need to change towards planning and monitoring, since they are both now considered as means unto themselves, an “end product” as opposed to tools to implement management systems and to evaluate their efficacy and adequacy.

In the end, a successful planning process and the actual implementation of the resulting plan will benefit heritage practices in the long term by enhancing local capacities and expertise, by promoting collaboration and participation in conservation endeavors, and by fostering institutional mandates and policies that integrate cultural and natural heritage as a key component of human development. The accomplishment of a sustainable implementation of a management plan will be closely related to the ability to manage and adapt to change.

The following two schemes are intended to illustrate a participatory, value-driven approach towards heritage management and its cyclic nature.
To manage and conserve a heritage site one needs to understand the interdependencies between different factors that are continually evolving and stressing the material fabric, including the conditions that existed between the time of the volcanic event, the excavation process and the exposure to new environmental situations.

Process for managing a Heritage Site

PLANNING

Decision to plan

Feasibility study

no

yes

Alternatives

Team Integration Definition of goals

Action Control Emergency

PLANNING & MANAGING

DOCUMENTATION

Understand the Heritage Site and its context

Ascribe significance and determine conditions of the Heritage Site and its context

Monitor Evaluate Review

Record and collect data

Analyze information

Define action plan to manage the Heritage Site

Define and implement actions

Manage the Heritage Site

RESPONSE
### Adapting the model and planning the process

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