



Summary

Conservation Area Planning For Tangible Cultural Resources



Guatemala, August 2003

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SPECIAL THANKS

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SUMMARY

CONSERVATION AREA PLANNING FOR TANGIBLE CULTURAL RESOURCES

INTRODUCTION

Conservation Area Planning (CAP) is a methodology developed by The Nature Conservancy (TNC) and its partners to analyze information about a natural area and plan activities that best address priority conservation needs. Although this tool was designed for the conservation of biological diversity, TNC's worldwide experience demonstrate that many of these areas include valuable cultural heritage that should also be preserved. This document presents a summary of a methodology that can be applied to plan the conservation of tangible cultural resources following the same process created for biodiversity conservation planning. Generally speaking, the purpose here is to conserve tangible cultural resources and reduce and/or eliminate critical threats (deterioration and causes of deterioration of greatest impact), that are damaging to them. By identifying these priorities, the CAP allows planners and protected area managers to better allocate limited human and financial resources assigned to the areas. The main purpose is to provide a planning methodology for the conservation of natural and cultural resources in a given area.

Up until now, this methodological proposal has been modified and improved with valuable contributions made by a group of experts that have been working in conservation. Input from the first application of CAP on the field, led to the formulation of 2003-2008 Tikal National Park's Master Plan (that took place from July to December, 2002), a strategic plan that covers the conservation of natural and cultural resources.

This is a summary of the document "Conservation Area Planning for Tangible Cultural Resources", which is still being revised and improved, and will be soon available in www.parksinperil.org.

The CAP is an iterative methodology comprised of six stages that produce two specific products:

Priority conservation strategies that mitigate and/or eliminate the critical effects and causes of deterioration that are damaging a cultural target; to recover and/or improve the cultural integrity of a target (through restoration and management); to develop the potential use and strengthen the conservation capacity of an area or institution.

A conservation monitoring system to measure the impact of conservation strategies and actions in an area (in other words, measure the levels of success) and provide feedback for the evaluation of conservation strategies (adaptive management), as necessary.

PLANNING PROCESS INFORMATION REQUIREMENTS

The first step in a conservation area planning process is to gather and analyze several types of data: **information regarding the status of cultural targets, integrity, authenticity, threats, social and natural context.**

The **social context** is extremely important in order to better understand and identify the values of cultural targets for conservation, and its underlying causes of deterioration in relation to human activities (i.e.: legislation, public policy, stakeholders' attitudes, interests, needs, land use, economy, land tenure, capacities, etc.), as well as to develop effective conservation strategies and to carry out monitoring.

The **area's natural context** is also very important as it allows an understanding of the way and extent to which natural factors (humidity, winds, vegetation, fauna, geology, precipitation, topography, natural disasters, etc.) impact upon the conservation of selected cultural targets. In other words, it allows the practitioner to determine and characterize the effects and causes of deterioration in order to develop strategies and measure any mitigation and/or elimination of the principle causes leading to deterioration.

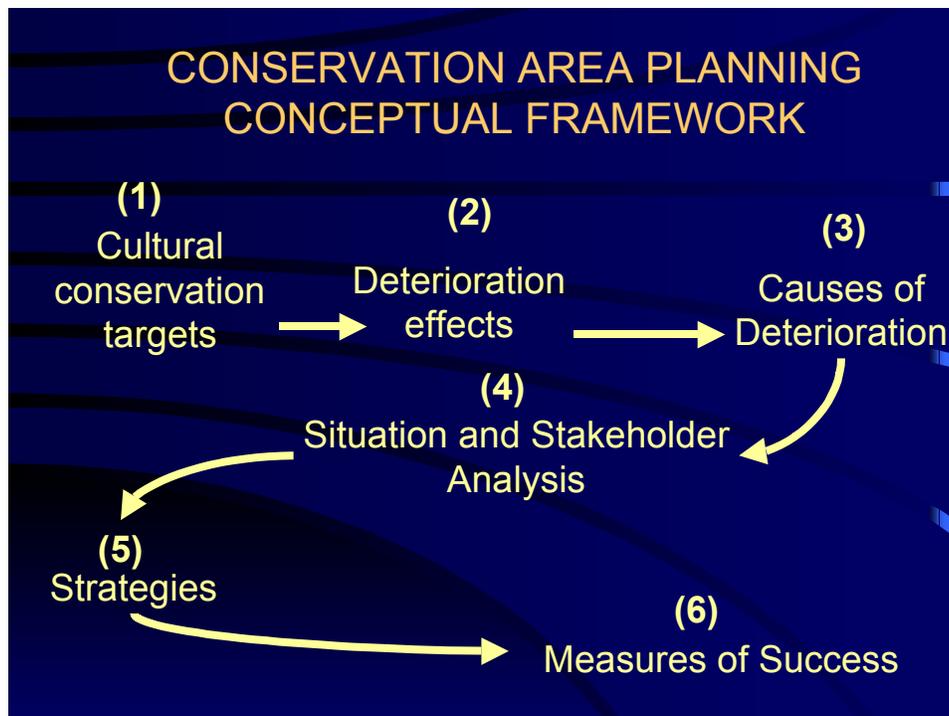
With this information at hand, it is possible to initiate the planning process of tangible cultural resources in a given area.

THE METHODOLOGICAL FRAMEWORK

The methodological framework for area conservation planning is comprised of six key steps, which are summarized in the following chart.

A brief description of the various methodological framework components for conservation area planning is included below.

The methodological framework and guidelines for its application are described in greater detail in the document "Conservation Area Planning for Tangible Cultural Resources".



COMPONENT 1: CULTURAL CONSERVATION TARGETS

Cultural conservation targets:

This refers to a cultural heritage category, which individually or as an association and based on their characteristics, attributes and/or management needs, justify the establishment of an area for its management and conservation.

A. Identifying cultural conservation targets

In order to justify the selection of priority tangible cultural targets it is necessary to document and justify those that are most relevant. It is important to mention that those targets with less prominence are not being excluded.

B. Cultural conservation target categories

Cultural region: Grouping of cultural areas that possess common characteristics associated by their connectivity, continuity and cultural-historical coherence. Examples: the Meso-American region, Guarani Jesuit Missions region.

Cultural area: Association of zones linked by historical, ethnological or stylistic aspects. For example: the Northern Maya Lowlands, the Pacific Coast of the Maya Region.

Cultural zone: Association of sites linked to events, occupations or cultural and historical activities. For example: Chan Chan archaeological zone in Perú, Kaminal Juyu archaeological zone in Guatemala.

Unit/Cultural site: The location of a significant event, an occupation or a prehistoric or historic activity or a building or structure or association of these, that possess historical, cultural or archeological value ¹. This may coincide with human settlements (of different sizes), cities, towns, villages, archaeological, prehistoric or colonial sites, cemeteries or sanctuaries, among others. For example: Joya de Cerén archaeological site, El Salvador, Uaxactún archaeological site, Guatemala.

Group, sector or grouping of buildings and constructions: Buildings and constructions associated by the historic period in which they were built or the function they played such as acropolis, squares, archaeological complexes, neighborhoods or urban centers, religious quarters, living quarters, production sites, among others. For example: the Northern Acropolis of Tikal in Guatemala, the complex of San Francisco de Lima in Peru.

Building/structure: Individual physical works that are related to domestic, civilian, military/defensive, productive, transport and recreational activities, to name a few, and in which human activities can take place (houses, temples, palaces, hotels and others). Other structures built to carry out these different functions include bridges, pavements, aqueducts, walls, tunnels, etc. For example: Temple I of Tikal in Guatemala, the Cathedral of México City.

Movable cultural object: Relatively small scale components that may or may not be easily moved. As shown in previous cases, they possess a large historic, artistic, ethnological, paleontological, archaeological and technological value and are intimately linked to their natural and social surroundings. These objects may include sculptures, stuccos, steles, lintels, paintings, utensils, mural paintings, petroglyphs, etc.

River basin: Area which falls into one drainage system. In some cases, cultural limits may coincide with a physical limit such as this.

¹ Taken from the Guidelines for Local Surveys: A Basis for Preservation Planning. U.S. Department of Interior. National Register Bulletin 24. National Register of Historic Places, Interagency Resources Division. National Park Service U.S. Department of Interior. 1977 Washington D.C.

The **criteria** that must be applied to evaluate the meanings and select conservation targets are:

1. Intrinsic

- **Representation:** they express the characteristics of cultural processes within a region or area. Their selection is based on historic, archeological and ethnohistoric information available.
- **Singularity:** they constitute unique examples based on their historic period, artistic richness, typology, origins, originality, authenticity, technology used, scientific contribution, etc.
- **Integrity:** this refers to the extent to which the target maintains its original characteristics, both for what they express as for their physical composition, materials and construction systems which reflect their natural surroundings, socio-cultural values and technological knowledge of the period during which they were built².
- **Authenticity:** the extent to which a target expresses its true origin, evolution and values (even if some of its components are missing).
- **Connectivity:** links and historic/cultural relation to different periods and regions and between one generation and another. The cultural target permits a connection to past and future promotes education and strengthening of identity through the vital information it contains.
- **Age:** this refers to the time during which the target was created, providing it with greater intrinsic value on the basis of the time progressed since its elaboration.

2. Extrinsic

- **Management:** a focus on highly threatened and vulnerable conservation targets will help ensure that the most important causes leading to deterioration are identified and conservation strategies are developed and implemented.
- **Popularity:** this term refers to certain cultural targets having a greater acceptance than others among the general public, reason for which their conservation is justified.

It is important to take into account that some criteria may prevail over others or that a contradiction may come up; for example knowing whether to conserve the authenticity of a given target versus exhibiting it before the public if it's highly popular. As a result, the planning team must resort to the best criteria and knowledge at hand.

² Integrity is related to age and authenticity, a correspondence with past associations in terms of what is being expressed. National Parks Service, "Cultural resources management guideline", United States Department of the Interior, 1997.

Examples of applying selection criteria for priority cultural conservation targets include:

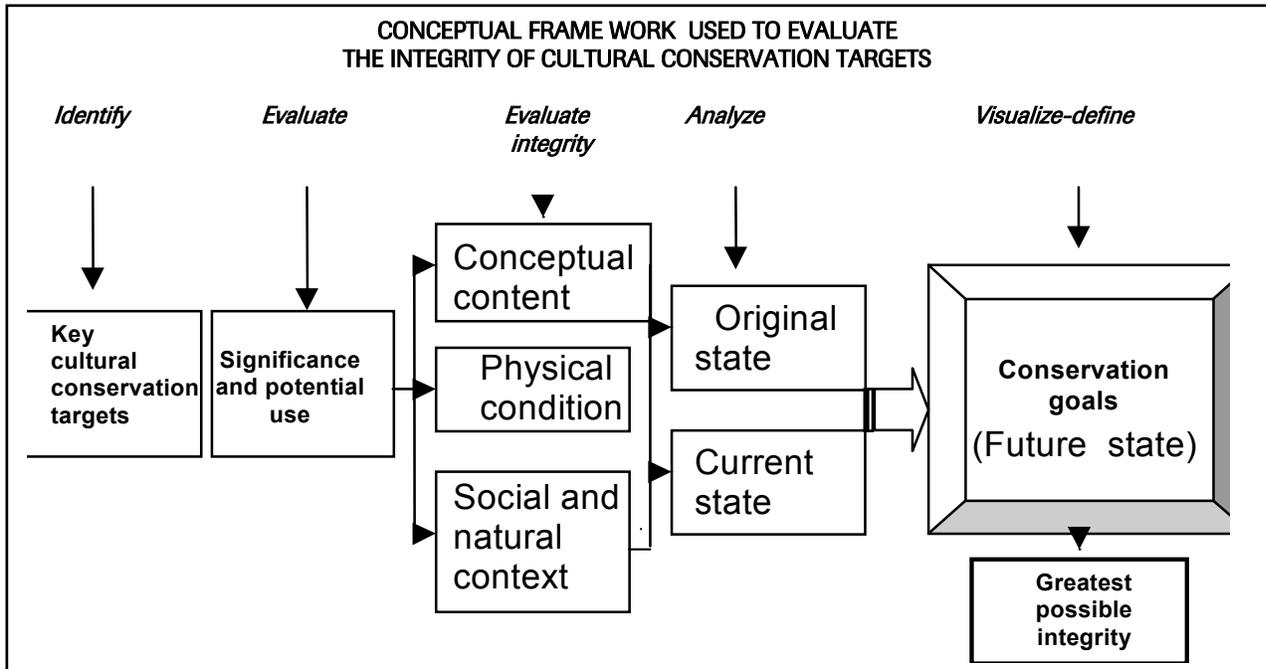
- **Cultural sites** important for their *connectivity* that express a historic or cultural link to different periods, and which connect the past, present and future and strengthen cultural identity while also having a high educational and informative potential.
- **Groups of buildings** that constitute *unique* examples, based on their historic period, artistic wealth, typology, origins, integrity, authenticity, technology employed, scientific contribution, etc.
- **Representative buildings** in which the characteristics express the cultural processes of a region or area. Their designation is based on available historical, archaeological or ethno-historic information.
- **Movable cultural object** of exceptional *integrity*, that maintain their original characteristics for what they express and for their physical and material composition which reflects the natural surroundings, the socio-cultural values and technological knowledge of the period during which they were built.
- **Structures** that are highly vulnerable and seriously *threatened*.

The **attributes** that may help select priority targets and assign them a conservation goal according to their function include:

- Historical, aesthetic, scientific, (research), technical
- Social, spiritual-religious, educational, based on identity
- Economic, touristic, productive
- Landscape, scenic

C. Analysis of cultural integrity

Once all priority targets (which are key to ensure the long-term integrity of an area) have been identified, three of their characteristics should be analyzed: **conceptual content, physical condition and context**. A categorical evaluation (ranging from very good to poor) of the current status of these three factors allow a characterization of a target's cultural integrity within an area. This evaluation and prioritization provides the basis upon which to analyze the effects of deterioration that threaten cultural conservation targets. It also allows corresponding conservation strategies to be developed.



- **Conceptual content:** this refers to the extent to which a target reflects socio-cultural values of a historical period from which it dates, its authenticity, age, information, messages and meanings it transmits.
- **Physical condition:** this refers to a comparison between a target's original and its current state, based on:
 - How intact or deteriorated is compared to its original state (extension, volume, number of architectural elements),
 - How altered is on a spatial level by changes, justified and non-justified attachments, stratification, etc.
 - How degraded its materials and shapes are.
- **Context:** based on the natural and social surroundings, which includes key³ natural and/or social factors that contribute or impinge upon the conservation or degradation of selected cultural targets.

³ Key factors for conserving the integrity of cultural resources are those that are necessary to maintain the quality of its characteristics so that they may remain over time. Key natural factors may include environmental regimes such as wind, rain, temperature, humidity, micro-climate, geology, earth tremors, fire and floods that may impact on the destruction and deterioration of cultural conservation targets. Key social factors may include land tenure regimes, development policies (infrastructure, transport, settlements, tourism, productive, etc.) changes in land use, etc. These key natural and social factors affect cultural resources in their materials, structure and messages so that we could talk about physical, spatial and conceptual changes. On a physical level chemical and biological

An evaluation of cultural conservation targets integrity must be presented within a summary chart that contains assigned qualifications accompanied by corresponding justifications. A qualitative valorization that allows values to be assigned to each criteria for the integrity analysis is presented below:

TABLE 1: GUIDELINES TO ASSIGN HIERARCHICAL VALUES TO THE CULTURAL INTEGRITY

Conceptual content:	
Very good	Fully expresses in a complete fashion all the historical characteristics of the period which it represents
Good	Expresses almost in its totality the historical characteristics of the period which it represents
Regular	Expresses some of the historic characteristics of the period it represents
Poor	Expresses a few of the characteristics of the period which it represents

Physical condition:	
Very good	Expresses that it has a complete representation of all of its components and that its spatial, material, structural, morphological characteristics are in good shape.
Good	Expresses that its representation is almost complete by 75% and that has few alterations in its spatial, material, structural and morphological characteristics
Regular	Its representation is incomplete with only 50% of its parts intact and with many modifications in its spatial, material, structural and morphological characteristics
Poor	With incomplete representation of almost all its parts (only 25% intact) and with significant modifications to its spatial, material, structural and morphological characteristics

deterioration may exist, and on a spatial level there may be static loss to the structure. On a conceptual level loss of information could have occurred in terms of ideas, symbols, historic connectivity associations, and artistic, technological and scientific value.

Context:	
a. Natural context:	
Very good	Almost all natural factors favor conservation of selected cultural target
Good	Most natural factors favor conservation of cultural target
Regular	Many existing natural factors promote the deterioration of cultural target
Poor	The majority of social factors promote a deterioration of cultural target
b. Social context:	
Very good	Almost all social factors favor conservation of cultural target selected
Good	Most social factors favor conservation of the cultural target
Regular	Many social factors promote a deterioration of the cultural target
Poor	The majority of social factors promote a deterioration of the cultural target

D. Setting conservation goals

Evaluating the integrity of a cultural target helps define conservation goals within a given area. When undertaking this evaluation, the following questions must be kept in mind: what was the cultural target original state of integrity? What is its current state of integrity? What is the desired state of the conservation target? Conservation goals can then be developed in a given area based on this analysis.

An example of a conservation target:

- To ensure the integrity of priority cultural targets based on their conceptual content, physical condition and context.

COMPONENT 2: DETERIORATION EFFECTS

Deterioration effects

Types of degradation and damage to a given conservation target's conceptual content, physical condition and context that result in a reduction of its integrity.

The effects and causes analysis related to deterioration described in the following step, is key to better understanding the problems facing a given site and to being able to focus on conservation strategies to mitigate and/or eliminate the most serious causes behind deterioration and loss of integrity.

A. Identification of the effects of deterioration over cultural conservation targets

When identifying deterioration of a conservation target, the following important points should be considered:

- For planning purposes, an effect of deterioration is the destruction or degradation of conservation targets that result from human or natural causes.
- The effects of deterioration that should be considered must be taking place at that time or must have a high probability of occurring in the near future (10 years).
- The effects of deterioration that negatively impact upon a cultural target must be identified and prioritized.
- It is important to be as precise as possible while identifying the effects of deterioration as this will help to identify causes and conservation and restoration strategies designed to improve the cultural integrity of an area.

TABLE 2: ILLUSTRATIVE LIST OF DETERIORATION EFFECTS

PHYSICAL DETERIORATION			
<u>Destruction</u>	<u>Material Disintegration</u>	<u>Structural instability</u>	<u>Alteration</u>
a. Collapse	a. Erosion	a. Fractures, cracks	a. Spatial
b. Mutilation	b. Salinization / efflorescence	b. Fragmentation	b. Of surrounding environment
c. Loss of volume	c. Pulverization	c. Tilting	c. Molecular
d. Loss of elements	d. Dissolution	d. Filtration	d. Superficial spots or alterations
e. Sinking	e. Decolorization		e. Footprints (of dead microflora)
	f. Exfoliation		f. Turgicence (root marks)
	g. Oxidation		
CONCEPTUAL DETERIORATION			
	a. Loss of information		
	b. Loss of historic connectivity and its context		
	c. Loss of significance		

B. Evaluation and priority-setting of deterioration effects

Based on the best available information and available judgment, a hierarchical value (very high, high, medium, low) of the effects of deterioration upon each priority conservation target is chosen. Even though all reasoning behind the deterioration effects should be documented, it is important also to prioritize these on the basis of criteria such as **intensity** and **scope**. The prioritization of deterioration effects will mean that it will be strategically possible to evaluate whether it is worthwhile to worry about a deterioration effect and its severe impacts over a reduced area or about the low intensity effects of deterioration over a wider area. Conservation strategies must be oriented towards reducing or eliminating those deterioration effects that are of high intensity combined with a wide scope.

The relative severity of deterioration is based on two factors:

1. **Intensity of the damage:** What is the level of damage to a conservation target within a 10-year framework under existing circumstances?
2. **Scope of damage:** What is the conservation target's impact within a geographical area during a 10-year period under the existing circumstances? Does it relate to an effect of deterioration found throughout the conservation target or are these effects localized?

TABLE 3: GUIDELINES TO ASSIGN HIERARCHICAL VALUES TO EFFECTS OF DETERIORATION

Intensity of damage: This refers to the impact a cultural conservation target may experience over a 10 year period under existing circumstances (assuming that the current situation persists) and which is reflected in levels of <i>destruction</i> and <i>degradation</i> .	
Very severe	Deterioration will probably <i>destroy</i> or <i>eliminate</i> the conservation target
Severe	Deterioration will probably <i>seriously degrade</i> the conservation target
Moderate	Deterioration will <i>moderately degrade</i> the conservation target
Low	Deterioration will <i>slightly degrade</i> the conservation target

Scope of damage: This refers to the scope over which damage to a conservation target is felt and which may reasonably be expected within a 10 year period under existing circumstances (assuming that the current situation persists).	
Very high	The deterioration will probably have a <i>very wide distribution</i> and affect the <i>totality of conservation target</i> .
High	The deterioration will probably have a <i>wide distribution</i> and affect the conservation target in <i>some of its parts</i>
Moderate	The deterioration will probably have a <i>limited distribution</i> and affect the conservation target in <i>few of its parts</i> .
Low	The deterioration will probably have a <i>very limited distribution</i> and affect the conservation target in <i>very few of its parts</i> .

COMPONENT 3: CAUSES OF DETERIORATION

Causes of deterioration

This refers to anthropogenic or natural actions, processes or agents that generate deterioration. Together, the imposed causes of deterioration and deterioration effects of a priority cultural target represent the threats to the cultural integrity of an area.

A. Identification of causes of deterioration

Most causes of deterioration are associated with incompatible land, water and natural resource use that are taking place or have taken place in the past, but continue to have an impact. Several issues should be considered while identifying causes of deterioration to a conservation target:

- When multiple causes of deterioration contribute towards a particular type of degradation, strategies must focus on mitigating those threats that have the greatest impact in terms of deterioration.

- Strategies must focus on those causes of deterioration, which have the greatest impact in the long term such as urban development, agriculture, etc.
- The causes of deterioration to be considered must be taking place in the present or have a high probability of occurring in the near future. The causes that are no longer affecting the conservation target should not be considered.
- Identify the direct causes of deterioration (for example archeological looting) since the far ranging causes of deterioration to the conservation targets do not allow the development of direct and reasonable conservation strategies.

TABLE 4: ILLUSTRATIVE EXAMPLES OF CAUSES OF DETERIORATION

<p>Agriculture and forestry Inadequate agricultural practices Inadequate forestry practices Inadequate cattle ranching practices</p>	<p>Water Management Dam construction Canals or underground works construction Closeness to the water table Inadequate rainwater canalization</p>
<p>Land Use Urban development Mismanaged tourism Incompatible industrial/commercial development Incompatible road and services development Irrigation canal construction</p>	<p>Resource Extraction Inadequate mining practices Inadequate petroleum exploration and exploitation practices Archeological looting</p>
<p>Recreation Incompatible recreational use Unregulated visits</p>	<p>Institutional Archeological projects w/o conservation measures Abandonment</p>
<p>Pollution Industrial waste discharge Untreated sewage discharge Solid waste Acid rain</p>	<p>Natural Weathering Seismic activity Cyclones, tornadoes Geological faults Soil types Aging</p>
<p>Biological Flora, microflora Fauna habitat Uncontrolled vegetation growth</p>	

B. Evaluating causes of deterioration

Based on the best available knowledge and expert advice each cause of deterioration must be evaluated according to contribution and irreversibility criteria.

The relative severity of a cause of deterioration is based on two factors:

1. **Level of contribution to deterioration.** This refers to the extent to which a cause of deterioration contributes to deterioration itself, even when an existing management/conservation situation continues. Does the cause of deterioration

represents a very significant or substantial contribution or is its contribution moderate or low?

2. **Mitigation capacity of deterioration.** This refers to the capacity to stop or eliminate the deterioration created by a certain cause. Does a cause produce a deterioration effect that may be mitigated or eliminated at a very high cost, or that can be stopped with a moderate or low investment?

TABLE 5: GUIDELINES TO ASSIGN HIERARCHICAL VALUES TO CAUSES OF DETERIORATION

Contribution: This refers to the contribution of a cause to a certain deterioration effect, under the assumption that current management/conservation situation persists.	
Very High	The cause makes a <i>very high</i> contribution towards a particular effect of deterioration.
High	The cause makes a <i>high</i> contribution towards a particular effect of deterioration.
Moderate	The cause makes a <i>moderate</i> contribution towards a particular effect of deterioration.
Low	The cause makes a <i>minor</i> contribution towards a particular effect of deterioration.

Level of Mitigation: The extent to which the effect of deterioration generated by a certain cause can be by controlled.	
Very High	The cause produces a deterioration effect that is <i>irreversible</i> . For example, the loss of cultural targets and scientific information (deterioration) as a consequence of looting (cause).
High	The cause produces a deterioration effect that is <i>reversible</i> , but in practice is neither <i>economically</i> nor <i>socially viable</i> .
Medium	The cause produces a deterioration effect that is <i>reversible</i> if a <i>reasonable amount of resources are committed</i> .
Low	The cause produces a deterioration effects that is <i>easily reversible</i> at a <i>reasonably low cost</i> .

C. Prioritization of deterioration effects and its causes to identify critical threats

Conservation investments must focus on the most serious threats. The final stage in the analysis of deterioration effects and its causes involves a synthesis of individual causes to each conservation target. This allows the definition of critical threats over each and all cultural conservation targets, and consequently, to the whole planning area.

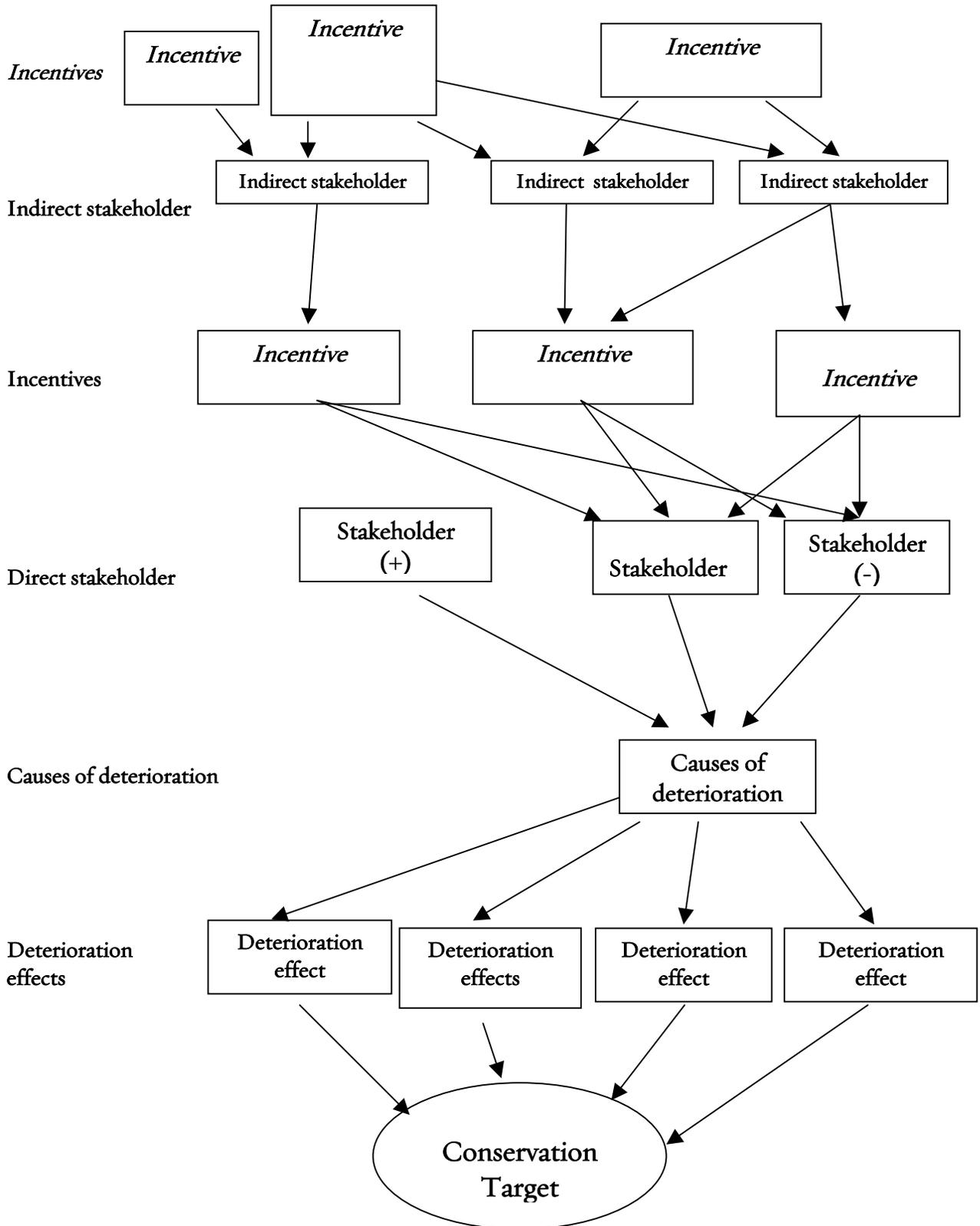
COMPONENT 4: SITUATION AND STAKEHOLDER ANALYSIS

Once critical threats (deterioration effects and its causes) have been identified and prioritized in a given area, it is necessary to identify key stakeholders behind these threats, and their incentives and interests.

For this purpose, a **situational diagram** and a **stakeholder analysis** is carried out. During this exercise cause and effect relations are represented graphically among conservation targets, in addition to **causes of deterioration, anthropogenic activities, key stakeholders and incentives resulting in their behavior**. The planning team uses this tool to better understand complex situations within and around a given work area and to identify direct and indirect stakeholders that without this exercise may not initially be evident.

The following diagram provides an example of this step:

Situational Diagram and Stakeholder Analysis



COMPONENT 5: CONSERVATION STRATEGIES

Conservation Strategies:

This refers to conservation actions developed and implemented in order to:

- Mitigate and/or eliminate critical causes of deterioration in a given area (threats mitigation)
- Restore or improve the cultural integrity of an area (through restoration and management) which are based on national and international conservation guidelines and principles, like Venice Chapter, Athens Chapter, UNESCO conventions, ICOMOS, etc.
- Develop the potential use of cultural conservation targets (educational, scientific, tourism, etc.)
- Strengthen the conservation capabilities of an area.

The final conservation strategy goal is to reduce the effects of deterioration that affect cultural conservation targets and degrade their integrity. Similarly, the goal is to develop their potential for which it will be necessary to:

- Elaborate a list of strategies for each cultural target, according with its critical threats.
- Evaluate proposed conservation strategies according with the following criteria: conservation benefits of its implementation; likelihood of being successful, and implementation costs.
- Prioritize conservation strategies at an area level in order to determine the most urgent actions to be taken.

A. Evaluation of proposed strategies

The criteria to evaluate and rank the proposed conservation strategies are the following:

1. Benefits

- **Threats abatement:** How likely is it that a given strategy will eliminate a critical threat impinging over a cultural conservation target? Has the proposed strategy been designed for the mitigation of this critical threat? The answer, after an in-depth discussion, should be yes or no. If the answer is yes, the strategy is considered for the next criteria, and if no, it goes out of analysis.
- **Influence:** Will this strategy be a catalyst that promotes other conservation actions in our conservation area (or other areas)?

2. Feasibility of Success

- **Feasibility:** Notwithstanding the best plans and most qualified individuals, there are an infinity of external factors that can determine success, failure or a change of plans. Among the most complex strategies, it will be very likely that external unexpected factors will substantially affect results. In consequence, it is wiser to invest in simple, easily achievable and small-scale conservation strategies.

3. Implementation Cost

- **Availability of resources:** The availability of current resources and probability of assuring new ones must be considered in order to implement a conservation strategy.
- **Financial sustainability:** When selecting strategies one must always take into account the adequate long-term follow up on the part of the responsible local conservation organization, specially regarding the maintenance of restored cultural monuments.

TABLE 6: GUIDELINES TO ASSIGN HIERARCHICAL VALUES TO THE STRATEGIES

Benefit/Influence:	
Very High	Immediate, tangible and highly influential results over other high impact strategies
High	Immediate, tangible and highly influential results over one strategy of high impact
Moderate	Results exert a moderate influence
Low	Results have no apparent influence

Feasibility:	
Very High	The implementation of this strategy is very clear and straightforward. This kind of strategy has been frequently implemented before
High	The implementation of this strategy is relatively clear and straightforward. This kind of strategy has been implemented before
Moderate	The implementation of this strategy requires certain number of complexities, uncertainties or obstacles. This type of strategy has rarely been implemented before
Low	The implementation of this strategy involves many complexities, obstacles and uncertainties. This strategy has not been implemented before.

Implementation cost:	
Very High	The total cost of implementing a strategy is greater than may be invested within the current budget framework of an area and there is no institution that is interested in financing it
High	The total cost of implementing a strategy is greater than what is available within the current budget but a complex fundraising effort will have to be carried out to obtain additional funds.
Moderate	The total cost of implementing a strategy is within the existing budgetary framework but adjustments must be made to the operational plan.
Low	The total cost of implementing a strategy is within the existing area's budget and its implementation has already been considered within the Operational Plan.

Financial sustainability:	
Very High	The implementation of this strategy involves very low maintenance costs
High	The implementation of this strategy involves moderate maintenance costs
Moderate	The implementation of this strategy involves high maintenance costs
Low	The implementation of this strategy involves very high maintenance costs

COMPONENT 6: MEASURES OF CONSERVATION SUCCESS

Conservation Success Measures

Measuring conservation impacts involves monitoring the cultural integrity and status of critical threats in order to provide feed back to evaluate the impact of conservation strategies and improve the management of the conservation area of our interest. Also, measuring the conservation capacity monitors the institutional strengthening necessary for successful implementation of conservation strategies.

Conservation success in a specific area has been defined as substantial progress towards the mitigation of critical threats and the maintenance or improvement of the cultural integrity of a conservation target. This is how threat status indicators and integrity status are monitored and provide the necessary evaluation of the overall impact of conservation within an area over time. The planning and implementation team must design a monitoring program that gauges threats and provides appropriate information to effectively guarantee adaptive management.

Nevertheless, there is frequently a time delay between the implementation of strategies and the mitigation of critical threats as well as an even greater delay between implementation and an evident change in cultural integrity. As a result, a group of indicators is used in the short term that reflect the institutional conservation capacity to implement conservation strategies developed through the planning process for conservation areas.

In summary, measures of conservation success are associations of indicators classified in the following categories:

1. **Cultural integrity:** It measures the effectiveness of conservation strategies in order to improve or maintain the integrity of conservation targets using, as a starting point, the integrity evaluation (conceptual content, physical condition and context) of conservation targets that took place after selection of priority targets.
2. **Critical threats status:** It measures the status and mitigation of threats in order to evaluate the effectiveness of conservation strategies. It is based on an evaluation of deterioration (intensity and scope) upon conservation and its respective causes (contribution and mitigation).
3. **Conservation capacity:** It provides a way to monitor the following key factors of a project's success within an area:

3.1. **Leadership and project support:**

- **Responsible and capable personnel.** Personnel in charge have the responsibility, skills and experience necessary to adequately manage the area.
- **Experienced adviser available.** Experienced adviser (s) available in order to provide high level guidance.
- **Technical support.** Multidisciplinary technical team works full time providing support to the area.

3.2. **Strategic method:**

- **Conservation area plan.** The area should have a solid conservation plan that provides strategic guidance.
- **Measures of success.** The area should have an efficient monitoring system that provides feedback for adaptive management.

3.3. **Financing and project sustainability:**

- **Short-term funding.** The area should have sufficient funding for its basic operations and implementation of the most important conservation strategies during the next two years.
- **Financial sustainability.** The area should have a well-developed system of funding in order to secure its adequate long-term management.

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