

# THE INTRODUCTION TO THE CONCEPTUAL RESOURCE-BASED MEDIATION SYSTEM<sup>1</sup>

Larry D. Long

## I. INTRODUCTION

With continual increase in global population and increased natural resource consumption, natural resource disputes are inevitable.<sup>2</sup> Natural resource disputes are inherently complex and difficult to settle. They may quickly incorporate remote issues, additional parties, and pressure from public attention where “successful solution” has several definitions.<sup>3</sup> At the very least, the success of natural resource dispute resolutions should be measured by retaining the resource. Because many of these natural resources are limited, yet crucial for our survival, a more effective problem-solving approach is needed to conserve the quality and quantity of these resources. Proposed below is a new conceptual dispute resolution model, termed the Resource-Based Mediation System (herein referred to as “the Resource-Based System”), created to address the deficiencies in prior resource dispute practices, generate durable, long-lasting resolutions, and simultaneously conserve the resource.<sup>4</sup> This model is applicable to most natural resources; however, water disputes are the primary focus in this introduction.

---

<sup>1</sup> Copyright © 2013 Larry Long. All Rights Reserved.

<sup>2</sup> SARAH JANE MEHARG, *Measuring What Matters in Peace Operations and Crisis Management* (2009).

<sup>3</sup> *Id.*

<sup>4</sup> This article is a brief introduction to the Conceptual Resource-Based Mediation Model. For further insight into this model, view *Introduction of a Conceptual Resource-Based Dispute Management System: A Guide for the Resource Practitioner*.

During a dispute over natural resources, use of mediation as an effective problem-solving approach is often overlooked. Yet, mediation is able to expand solution options beyond those made available through litigation. The option to use other alternatives like mediation can demonstrate positive and promising results for those who elect to do so. Benefits include trust and the ability to provide the community with a sense of justice.<sup>5</sup> Unfortunately, basic mediation approaches do not address all factors surrounding resource and water disputes. Failing to consider these factors hinders the ability to establish a successful resolution.

## II. THE PROPOSED RESOURCE-BASED SYSTEM

The Resource-Based System is tailored to systematically analyze and resolve resource disputes. This conceptual dispute model uses effective measures from past practices, but also encompasses the underlying resource issues necessary to develop long-term solutions. Unlike other practices, the Resource-Based System addresses external issues related to the resource, in effect minimizing detrimental future impacts to the resolution. In practice, this dispute model will be able to provide guidelines for conducting the holistic analysis required to resolve resource disputes.

Procedurally, the Resource-Based System operates similar to facilitated mediation. Of all Alternative Dispute Resolution (“ADR”) forms, mediation is arguably the most flexible by its ability to provide the parties to the dispute (or “disputants”) with a more individualized process or resolution based upon their specific needs and interests.

---

<sup>5</sup> MEHARG, *supra*.

The most common mediation approaches to negotiation (Interest-based and Rights-based) both fail to resolve resource-related disputes because they:

- Use the disputant's interest as the primary focal point;
- Allow the disputants to position themselves during negotiations using self-interest and the law to manipulate and intimidate their opponents;
- Fail to consider the natural resource's physical limitations or availability;
- Seldom factor in the complexity of temporal affects or fluctuation;
- Do not fully identify the underlying cause of the dispute and instead only address the symptoms; and
- Allocate resources using a volumetric system that does not equally distribute risk to all parties.

Using the Resource-Based System as an alternative provides the necessary tools to address these issues and allows the disputants to make more informed decisions. The Resource-Based System creates an objective criterion to encompass the essential factors surrounding the resource and uses this criterion as a solution guidepost. Careful consideration of these factors during the formulation of the objective criterion allows the disputants to understand underlying problems and anticipate future issues.

Information related to the dispute is gathered through a practitioner, or mediator, acting as a third party neutral. Thus, the practitioner not only needs to understand the mediation process, but they must also hold experience with the resource and the related legal aspects. Hence, the ability to generate practical agreements can hinge on the practitioner's skills and experience. The practitioner's goal of helping the disputants resolve the resource dispute may be achieved through preparation, establishing the limitations surrounding the resource, determining

how those limitations will likely affect the type of resource disputed, and developing solution options which adhere to the guideposts.

A. Preparation

The preparation stage allows the practitioner to gather as much information as possible to ensure a smooth mediation down the road. Practitioners should hold early individual meetings with the disputants to ask questions and actively listen to the explanations or responses surrounding the dispute. Practitioners who have more issue spotting, active listening and questioning skills are more effective throughout the entire mediation and are more likely successful in helping the disputants find a solution.

Individual meetings are essential to gain an understanding of each disputant's concerns, behaviors, positions, interests, and goals. As an added benefit, the Resource-Based System permits the practitioner to collect all relevant information for use in the mediation without evidentiary restrictions. Practitioners may use a "Conflict Triangle" when necessary to review who each disputant is, how disputants interact, and identify each disputants' alleged cause of the dispute.<sup>6</sup> This is a valuable tool during preparation to analyze future productivity and determine whether mediation is appropriate for this dispute. Evaluation of the disputants' willingness to negotiate provides insight into how the practitioner might foster mutual resolution.<sup>7</sup>

---

<sup>6</sup> JENNIFER E. BEER et al., *The Mediator's Handbook* (3d ed. 1997).

<sup>7</sup> PETER T. COLEMAN et al., *Reconstructing Ripeness II: Models and Methods for Fostering Constructive Stakeholder Engagement Across Protracted Divides*, 26 *Conflict Resol. Q.* 1 (2008).

Early research into the dispute history is crucial to avoid repeating past mistakes. Discovery of the disputants' failed attempts in resolving similar disputes and characterizing the potential causes of failed settlements prevents the generation of similar solutions in the upcoming mediation. The practitioner must unveil individual interests, any existing legal rights, and desired solutions without letting these become the primary focal point of the mediation.

Disputants may then establish the mediation procedures. The mediation procedures can be tailored according to the needs of the disputants. After the practitioner researches and collects the necessary information, the practitioner will explain the procedure going forward.

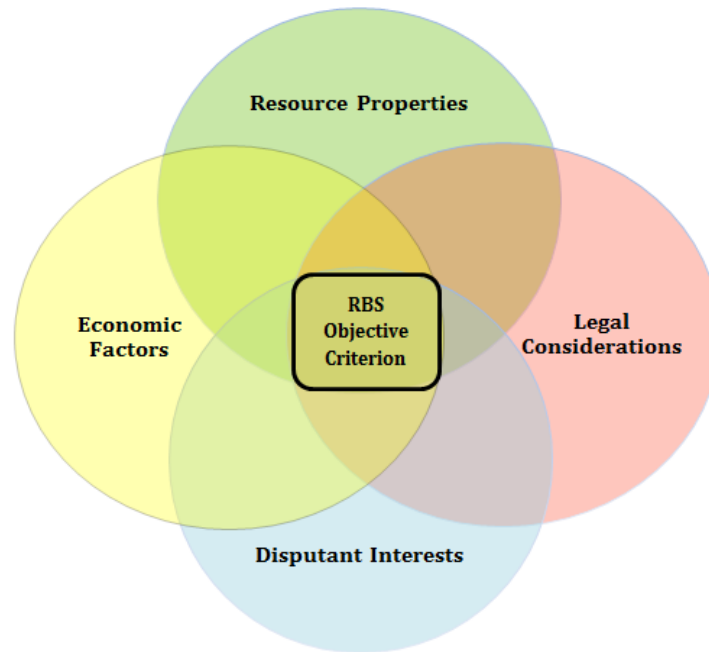
#### B. Establishing the Resource-Based System Objective Criterion

Once sufficient information regarding the disputants' interests and mediation goals is collected, the practitioner may then begin considering additional factors relating to the water body, or water source disputed, that could likely impact the future success of implemented agreements. An objective criterion is a mutually acceptable standard derived from credible, unbiased sources. Use of objective criteria during negotiations is quite useful because “[d]ecisions based on reasonable standards makes it easier for the parties to agree and preserve their good relationship.”<sup>8</sup> Although it may appear that objective criteria anchor one all-encompassing solution, it actually provides more of a playing board for disputants to discuss and develop multiple options to resolve the dispute. Development of the

---

<sup>8</sup> ROGER FISHER & WILLIAM URY, *Getting to Yes: Negotiating Agreements Without Giving In* (2nd ed. 1983).

objective criterion in the Resource-Based System addresses four major categories relating to the resource. Considerations include the resource's physical properties, applicable laws, economic factors, and disputant interests (see Fig. 1).



**Figure 1.** Resource-Based Objective Criterion Considerations

In effect, the use and formation of the objective criterion within the Resource-Based System separates this mediation model from other problem-solving approaches. The model permits a broader analysis rather than primarily focusing on singular considerations, such as individual interests. Focusing solely on the disputant's needs leads only to partial resolution and a dispute cannot be fully resolved if the resource no longer exists.<sup>9</sup> The use of these factors as a threshold ensures that future conservation of the resource will remain within the legal boundaries, if any.

---

<sup>9</sup> J.B. RUHL, *Water Wars, Eastern Style: Divvying Up the Apalachicola-Chattahoochee-Flint River Basin*, 131 J. Contemp. Water Res. & Educ. (2005).

### 1. *Resource Properties*

The resource properties must be considered to ensure availability and quality. For water disputes, the practitioner should use a watershed model to illustrate the current use and recharge of a water body alongside its chemical and biological properties. “Watershed models are driven by precipitation, land use type, impervious areas, slope, soil types and drainage area.”<sup>10</sup> This development allows users to predict outcomes of additional use and changes in water quality so disputants can prevent over consumption and/or degradation of the water body. Depending on current allotments of the water body, potential direct and cumulative impacts should also be considered. The practitioner can develop a watershed model or one may be developed by an outside expert for the specific water body in dispute.

Governmental regulatory agencies, for example, utilize similar models to conduct water quality studies and perform watershed management.<sup>11</sup> A Geographic Information System (“GIS”) is a valuable tool used by regulatory agencies as a provider of information pertaining to the area. “GIS organizes spatial information so it can be displayed as maps, tables, or graphics . . . [thereby allowing] the user to analyze landscape information and display relationships among data.”<sup>12</sup> Water body data is collected and then inserted into the watershed model in layers so the practitioner can determine availability and quality thresholds for the disputants.

---

<sup>10</sup> U.S. ENVTL. PROT. AGENCY, *Watershed Models* (visited November 1, 2013), at [http://www.epa.gov/athens/wwqtsc/html/watershed\\_models.html](http://www.epa.gov/athens/wwqtsc/html/watershed_models.html).

<sup>11</sup> U.S. ENVTL. PROT. AGENCY, *BASINS (Better Assessment Science Integrating point & Non-point Sources)*, (visited December 10, 2013), at <http://water.epa.gov/scitech/datait/models/basins/>.

<sup>12</sup> *Id.*

## 2. *Legal Considerations*

The established objective criterion for the Resource-Based System must function within the realm of the law. Applicable Federal, State, and local law must be considered by the practitioner so future agreements comply with resource uses already established by law. If the dispute stretches between multiple states, laws or doctrines related to the resource may conflict. The practitioner will need to address this discrepancy before an agreement is reached.

Practitioners must also consider any unveiled legal rights of the disputants and other users. However, the law sometimes allows and arguably encourages disputants to seek over consumption of the resource.<sup>13</sup> The practitioner should dissolve the “first in time, first in right” frame of mind without dissociating the user’s water rights. If an allotment issue arises, the practitioner can use similar approaches as those used by indigenous populations. Studies indicate that indigenous populations effectively approached water scarcity through time allocation, prioritized use, and protection of downstream use.<sup>14</sup> This is the water conflict resolution approach used by indigenous civilizations such as the Berbers, populating the High Atlas Mountains of Morocco. Allocating water use based on time, rather than volumetric quantity, equitably distributes risk of fluctuation rather than concentrating it on specific users. The Berbers prioritize and differentiate between types of use to prevent waste. Although prioritizing use is seemingly difficult, international treaties based on this concept do exist and include

---

<sup>13</sup> JOSEPH L. SAX & ROBERT H. ABRAMS, *Legal Control of Water Resources* (1986).

<sup>14</sup> AARON T. WOLF, *Intl. Negotiation: A Journey of Theory and Practice*, Vol. 5:2 (visited May 18, 2013), at <http://www.transboundarywaters.orst.edu/publications/indigenous/>.



such use prioritizations.<sup>15</sup> These mechanisms can be applied to modern day disputes.

Equitable distribution of downstream rights is an approach the United States is still learning. After several years of unsuccessful negotiations and court cases, water conflicts between the State of Florida and Georgia over the Apalachicola, Chattahoochee, and Flint (“ACF”) River Basin remain unsettled.<sup>16</sup> In fact, the State of Florida recently filed a complaint in the United States Supreme Court seeking equitable distribution and injunctive relief, alleging that the State of Georgia is excessively consuming water from the ACF, thereby detrimentally impacting Florida’s downstream use.<sup>17</sup> The allocations for Colorado River water have also experienced similar legal struggles.<sup>18</sup>

### 3. *Economic Factors*

Economic indicators can be the primary force in the decision-making process. They provide the foundation for governmental and individual perceptions of the value for natural resources, using tools that do not provide an equitable distribution

---

<sup>15</sup> *Id.*

<sup>16</sup> See RUHL, *supra*.

<sup>17</sup> TOLUSE OLORUNNIPA & MICHAEL C. BENDER, *Florida to Sue Georgia in U.S. Supreme Court Over Water* (visited August 14, 2013), at <http://www.bloomberg.com/news/2013-08-13/florida-to-sue-georgia-in-u-s-supreme-court-over-water.html>; See also Florida’s Motion for Leave to File a Complaint, Complaint, and Brief in Support of Motion (visited October 4, 2013), at [http://www.eenews.net/assets/2013/10/02/document\\_gw\\_03.pdf](http://www.eenews.net/assets/2013/10/02/document_gw_03.pdf).

<sup>18</sup> See SAN DIEGO COUNTY WATER AUTHORITY, *Water Authority Files New LawsUIT Against Metropolitan Water District Challenging 2013 and 2014 Water Rates* (visited March 12, 2013), at <http://www.sdcwa.org/water-authority-files-new-lawsuit-against-metropolitan-water-district-challenging-2013-and-2014-rates>; *Colorado v. New Mexico*, 459 U.S. 176 (1982); LÉNA SALAMÉ, *ADR... What, when, where, who, how and most importantly WHY?!* (visited September 12, 2013), at <http://es.slideshare.net/WaterforLife/mediation-and-dispute-resolution-techniques-and-approaches>; YONA SHAMIR, *Alternative Dispute Resolution Approaches and Their Application*, Israel Center for Negotiation and Mediation (visited February 4, 2013), at [http://webworld.unesco.org/water/wwap/pccp/cd/pdf/negotiation\\_mediation\\_facilitation/alternative\\_dispute\\_resolution\\_approaches.pdf](http://webworld.unesco.org/water/wwap/pccp/cd/pdf/negotiation_mediation_facilitation/alternative_dispute_resolution_approaches.pdf).

of liabilities or evaluating the true cost of the resource. Natural resources accumulate over thousands of years at no monetary cost. Cost-benefit analysis is used to determine market value associated with resources. When used for natural resources, this analysis reviews market cost such as collection, distribution, marketing and not the replacement of the resource or alternative sources of those resources. Generally the cost or market value is passed on to the consumer. There are many tools that provide the market value for natural resources, but few that demonstrate the true cost. The true cost of resource would need to account for factors such as the replenishment or alternative source cost. Not addressing the true cost and limitations of the resource early on results in a type of revolving door scenario where the disputants revisit the issue over and over again based on the economic markets.

Many economic tools address the limitations of a resource by increase pricing, while other economic tools present a bias based on the concept of “Free Market” externalities. An externality, from an economic standpoint, is the cost associated with a good or product.<sup>19</sup> In the case of natural resources, outside market forces are generally not reflected in the true cost of the resource, which creates an economic distortion. “Economic distortions arise because there really are no free markets operating anywhere in the world, since governments of all types frequently intervene in the marketplace.”<sup>20</sup> Additionally, economic models can be constructed

---

<sup>19</sup> STEWART J. COHEN & MELISSA W. WADDELL, *Climate Change in the 21st Century* (2009).

<sup>20</sup> *Id.* at 177.

in such a way as to define a resource or a community as “structurally expendable,”<sup>21</sup> such is the case with environmental justice disputes where the resource or a community is expendable based on its economic model.<sup>22</sup>

International disputes illustrate a growing trend in the conservation of nature resources through the uses of Peace Park<sup>23</sup> type projects that apply the concept of *Emergy*.<sup>24</sup> Both concepts provide alternative approaches to determine the value of natural resources and lessen economic distortion.<sup>25</sup> The nexus is both economic and environmental being that the disputant may profit monetarily from conservation of the natural resource and the resource profits from the conservation efforts of the parties. There are several examples where “environmental conservation zones can facilitate the resolution of territorial conflicts.”<sup>26</sup> Peace Parks are examples of how resource liability can be distributed to individual parties and they also provide economic incentive for resource conservation. *Emergy*, on the other hand, is a process that considers all variables associated with the true cost of a resource.

#### 4. *Disputant Interests*

The practitioner must factor in the disputants’ interests and desired outcome, as expressed during preparation. Identifying and addressing the true needs of the disputants can be problematic due to the disputants masking the true cause by adding multiple layers of complexity from symptomatic self-interest positioning. To

---

<sup>21</sup> FILOMINA CHIOMA STEADY, *Envtl. Justice in the New Millennium* (2009).

<sup>22</sup> *Id.*

<sup>23</sup> SALEEM H. ALI, *Peace Parks* (2007).

<sup>24</sup> HOWARD T. ODUM, *Environment, Power, and Society for the Twenty-First Century* (2007).

<sup>25</sup> “*Emergy*” is an example of an ecological/economic concept brought forward by H.T. Odum, a world class ecologist, which combines ecology and economics to demonstrate the true value of ecological systems.

<sup>26</sup> See ALI, *supra*.

achieve this difficult task, the disputants must make their own, more informed decisions, and reevaluate their bottom line or Best Alternative to a Negotiation Agreement (“BATNA”), if required.<sup>27</sup>

The practitioner should seek to prevent individual interests from becoming the primary focus during the mediation. In the event the competing interests over the resource continue, the focus remains on satisfying disputant’s individual interests in order to end the mediation, rather than seeking to resolve the underlying causes of the dispute.<sup>28</sup> This task is achievable provided the practitioner has laid the proper foundation by close examination of the objective criterion and how it relates to the issues at dispute.

After collecting sufficient information to form the Resource-Based System objective criterion, the practitioner must then create a simple presentation to explain this information and its implications to the disputants.

### C. Conducting the Mediation and Reaching an Agreement

Although different disputes may warrant use of different approaches, use of facilitated mediation is recommended.<sup>29</sup> Facilitation involves a third party neutral and is used to encourage the disputants to generate solutions and come to a non-binding agreement. Helping the disputants form a satisfying agreement and properly implement that agreement hinges on the skills and knowledge of the practitioner.

---

<sup>27</sup> See FISHER, *supra*.

<sup>28</sup> See COHEN, *supra*.

<sup>29</sup> See BEER, *supra*.

Full disclosure or transparency of the issues by the practitioner at the beginning of the process is needed to reestablish the issue disputed and to start the trust building process. At the commencement of negotiations, the practitioner must facilitate open communication between the disputants to enhance understanding of true needs and separate misperceptions of their opponent's interests. Cooperation can lead to better communication and trust, thereby allowing the disputants an opportunity to generate more individualized solutions for themselves.

To encourage participation during the mediation, the disputants must be fully informed about the benefits mediation can provide. Based on the disputants' prior procedural decisions made during preparation, the practitioner will reiterate mediation guidelines and procedures to prevent confusion or escalation during negotiation. The factors used to develop the objective criterion must be clearly explained to the disputants so they may feasibly generate resolution options. The analysis used in formulating the objective criterion may be presented to the disputants to avoid unnecessary and uninformed protracted debate.

The goal during mediation is to facilitate disputant collaboration and the creation of several resolution options. Once the disputants generate a variety of possible resolution options, the practitioner may do a walk-through of all dispute-related matters before the disputants begin the selection process by:

- Revisiting the initial issues mentioned by the disputants during preparation;
- Identifying the symptoms and actual causes of the issue; and
- Explaining how outside forces (regulations, market forces, perceived needs and conservation) could affect each option.

Ideally, the practitioner should be able to educate and guide the disputants to achieve balanced solutions, while simultaneously conserving the disputed resource.

Once these options are generated, the disputants can then evaluate and select the most appropriate option to be implemented as a settlement agreement. Presenting the scenarios in a matrix allows the disputants to assign values to each option, essentially ranking them. Once the disputants narrow their alternatives down to the last few options, they may request the practitioner to rank them or recommend which options most closely adhere to the objective criterion. In practice, the disputants should understand that this process may take more time than initially planned. Time is an important factor at this point of the mediation because time constraint could cause a disputant to frantically agree to a settlement without full contemplation, likely resulting in unsuccessful implementation of the agreement down the road. Thus, the practitioner must ensure ample time is provided.

Once an agreement is reached, the agreement must be constructed in a manner that allows for verification, if need. However, the disputants must be informed that mediation material is often privileged and may not be used if one disputant later seeks relief in court.<sup>30</sup> Although solutions established through mediation are typically non-binding, the disputants can elect to form an enforceable solution. The disputants can sign a contract listing each disputant's duties and referencing the agreement. The disputants can also seek a third-party to enforce, or track the progress of the agreement as well as the resource availability to encourage and

---

<sup>30</sup> See *U.S. Fid. & Guar. Co. v. Dick Corp./Barton Malow*, 215 F.R.D. 503 (W.D. Pa. 2003).

incentivize compliance. These are examples of mechanisms that may also be used by the practitioner to follow-up on the implemented agreement's success. Through further analysis of these follow-ups, the practitioner can study successful outcomes and utilize those methods or update tactics to ensure the Resource-Based System conforms to present demands and continually provides long-lasting resolutions.

### III. CONCLUSION

Rather than using individual interests as the predominant factor to forming solution options, the Resource-Based System factors in the other necessary variables. These factors provide the foundation for a more pragmatic and global mediation model, which may be tailored to meet the needs inherent in other natural resource-related disputes. The manner in which these problems are currently resolved has proved ineffective, thereby demonstrating the need for a new system focused on long-term success and conserving the remaining resources.

By defining a resource's limitations and generating resolution options based off that standard, practitioners may more effectively protect mutual disputant interests and other stakeholders. Exploring new and innovative processes while also considering functional portions of prior systems will allow for a process that better evaluates the true cost associated with consuming limited natural resources. Unlike the prior ineffective approaches, the definition of "success" under the Resource-Based System is both objective and subjective: it not only conserves a natural resource, but also provides real solutions to satisfy individual interests.