#### REQUEST FOR BOARD ACTION

## HENDERSON COUNTY BOARD OF COMMISSIONERS

**MEETING DATE:** May 5, 2025

**SUBJECT:** Hickory Nut Gorge Recovery Plan – Proposal Acceptance

**PRESENTER**: Autumn Radcliff, Planning Director

Janna Bianculli, Senior Planner

**ATTACHMENTS:** 1. Budget Amendment

2. Scoring Matrix3. Scope of Services

4. Recommended Community Partners Group

5. Study Area Map

#### **SUMMARY OF REQUEST:**

On February 18th, the Board directed staff to release a Request for Proposals for a consultant to assist staff in creating a recovery plan for the Hickory Nut Gorge (HNG).

The Planning Department released the RFP in compliance with county and state procurement policies. On Friday, April 4th, staff received a total of three proposals. These proposals were scored based on the matrix provided to potential submitters. Cost is considered in scoring, but it is not the determining factor. The scoring committee was comprised of various planning, floodplain administration, code enforcement, emergency services, and engineering staff.

Equinox submitted the highest-scored proposal, and all evaluators agreed the firm was the most qualified for this critical task. The scoring matrix is attached. All proposals were submitted to the Board for additional review.

County staff will facilitate this plan's significant components and continue fostering established community relationships in addition to leading a Community Partners Group. Equinox will assist county staff in technical proficiencies related to recovery work and expand available resources.

#### **BOARD ACTION REQUESTED:**

Staff requests that the Board approve the selection of Equinox, their attached scope of services, the budget amendment, and the creation of a Community Partners Group.

#### **Suggested Motion:**

I move that the Board approve the attached budget amendment and contract Equinox for the Hickory Nut Gorge Recovery Plan; and

I further move that the Board establish the Community Partners Group and begin appointments at the May 21<sup>st</sup> meeting.

# LINE-ITEM TRANSFER REQUEST HENDERSON COUNTY



Department:		FINANCE	-
Please make the	e following line-item transfe	ers:	
What expense	e line-item is to be increa	ased?	
	Account 525500-538100	Line-Item Description PROFESSIONAL SERVICES	Amount \$ 162,214
What expense	line-item is to be decre	eased? Or what additional revenue is no	ow expected?
	Account 524500-454007	Line-Item Description FEMA GRANT FUNDING	Amount \$ 162,214
Justification: TO BUDGET FO APPROVED 5.5	OR HICKORY NUT GORGE	stification for this line-item transfer request. HELENE RECOVERY PLAN AND ANTICIPA	
		5.5.2025	
Authorized by Department Head		Date	For Budget Use Only
Authorized by Budget Office		Date	Batch #
Authorized by	County Manager	Date	Batch Date

Hickory Nut Gorge Recovery Plan Proposal Scoring Matrix				
Criteria	Total Points Available (100)	DbD	Equinox	Kimley-Horn
Qualifications and experience of firm and Project Manager	20	13	17	16
Qualifications and experience specific to disaster recovery plans	5	2	5	3
Proposed process and approach	30	19	26	22
Cost of proposal (evaluated based on county's formula)	10	9.38	10	7.21
References	15	10	15	15
Implementation schedule	20	20	20	20
	100	73.38	93.00	83.21

Received Proposals				
Hickory Nut Gorge Recovery Plan				
Firm Name	Date Received	Cost		Qualifying?
Kimley Horn	4/4/2025	\$	225,000	Υ
Destination by				
Design	4/4/2025	\$	173,000	Υ
Equinox	4/4/2025	\$	162,214	Υ



# SCOPE OF SERVICES HICKORY NUT GORGE LAND USE RECOVERY PLAN 4.25.25

# Task 1. Project Discovery: Download / Kick-off / Vision & Goal Setting

- Meet with the Steering Committee (Henderson County staff) which may also include select members of the Community Partners Group to discuss an approach to Public Engagement based on a desire to understand the community fabric, challenges, knowledge/data gaps, and range of desired outcomes/priorities.
- Work with the Steering Committee to create the Vision and Goals that will guide the plan. This will serve as a focal point for goals, action steps, policy, and strategy decisions as well as set the stage for effective implementation of projects to drive observable results to the affected communities.
- Identify and present lessons learned and best practices from other disasters and recovery planning
  engagements that our team's subject matter experts (SME) have supported to avoid pitfalls and realize
  desired outcomes. This includes setting the stage for eligible reimbursement and/or funding, grant
  assistance and support from groups such as, but not limited to, FEMA, HUD CDBG, USDA and Non-Profits
  as well as other related organizations/programs as part of project implementation. This will also include
  a discussion about FEMA buyouts.
- Meet with NCDOT to begin communication regarding NCDOT's progress and schedule a meeting to discuss multimodal options (sidepaths, bike and pedestrian infrastructure, river pathway or greenway)

<u>Client Responsibilities:</u> The County to provide a meeting space if the Steering Committee meeting is in person. County to provide a recommended list of Steering Committee members.

# Task 2: Inventory & Assessment

An early step in the recovery plan is an inventory and assessment of the geomorphic processes and changes preto post-storm, and subsequent realteration by humans, so that we can understand how the system may continue to move over the coming decades and hence locate and design more resilient infrastructure.

- A baseline review of the disaster and its impact on the area.
  - This should include personal testimonies to help residents feel ownership of the plan and bring forth ideas, issues, and possible paths forward with local input.
  - o Review existing plans, maps, documents, data, and other materials relevant to the project. Our team will study and consolidate applicable materials into the plan and supporting GIS system.
- Develop an inventory and assessment of issues and opportunities based on work with staff, stakeholders, and the public participation process.
  - Conduct or review an assessment of the damage to physical infrastructure and businesses. This
    includes working with staff to collect and analyze FEMA project worksheets and related sources of



damage assessment data to build a common picture of planned and approved projects that will require coordination through this Recovery Plan to avoid conflicts, improve outcomes, and promote collaboration.

 Conduct fieldwork with Henderson County staff to observe damage to structures, infrastructure, and natural resources.

<u>Client Responsibilities:</u> County staff will provide the consultant with all available existing plans, maps, documents, data, and other materials relevant to the project including GIS data within 30 days of the commencement of work.

# Task 3: Data Collection & Analysis

Equinox will develop a data request for the project to acquire available data from Henderson County's Geographic Information Systems (GIS) department. Equinox will utilize data that can be provided by Henderson County for the recovery plan. The Hickory Nut Gorge area, including the communities of Gerton, Bat Cave, and a portion of the US 64 corridor towards Edneyville experienced significant flooding and landslides due to Hurricane Helene. The team will undertake a comprehensive approach to data analysis for developing a Land Use Recovery Plan for the Hickory Nut Gorge area in response to the impact of Hurricane Helene. The purpose of this approach is to:

- Assess the damage and impacts of the hurricane on land use.
- Identify areas of vulnerability and risk.
- Inform decisions about rebuilding, recovery, and future land use planning.
- Enhance community resilience to future disasters.

The data collection process will involve gathering information provided by Henderson County to establish pre- and post-hurricane conditions.

#### **Pre-Hurricane Data**

- Geospatial Data such as:
  - o Land Use/Land Cover
  - Topography
  - Hydrology
  - Geology
- Infrastructure Data such as roads, bridges, utilities (water, sewer, power), communication networks.
- Socioeconomic Data to identify population density, demographics, housing characteristics, and property values.
- Environmental Data such as water quality data, ecological surveys, protected areas, rare species locations.



#### **Post-Hurricane Data**

- Damage Assessment Data for location and severity of damage to structures, infrastructure, and natural resources; debris locations.
- Hydrological Impact Data to determine flood extent, flood depth, streamflow changes, erosion patterns.
- Landslide and Erosion Data to identify landslide locations, size, and type; erosion areas; deposition zones.
- Infrastructure Damage Data to roads, bridges, utilities; service disruptions.
- Socioeconomic Impact Data which can be captured by the public survey to document the affected residents and businesses; emergency management reports.
- Environmental Impact Data to include water quality changes, habitat damage, pollution

#### **Data Collection Methods**

Equinox will utilize remote sensing (satellite and aerial imagery) provided by Henderson County to determine the amount of change that has occurred and to identify areas of damage and land cover change. We will conduct this prior to conducting fieldwork to ground-truth the remotely sensed data and assessment of damage to structures, infrastructure, and natural resources as mentioned in Task 2. We will utilize Geographic Information Systems (GIS) for integration and management of spatial data, provide spatial analysis to identify patterns and relationships, and create maps and visualizations.

#### **Data Analysis**

The data analysis process will involve using various techniques to understand the impacts of Hurricane Helene and inform the recovery plan. This will include a spatial, statistical, and qualitative analysis.

- The Spatial Analysis may include:
  - Overlay Analysis to include overlaying flood maps with land use maps to identify damaged areas within floodplains.
  - Change Detection using satellite imagery to assess deforestation or changes in impervious surfaces.
  - o Hotspot Analysis mapping areas with a high concentration of damaged buildings or landslides.
  - Transportation/Road Network Analysis assessing the impact on transportation and utility networks to identify critical transportation routes that were disrupted.
  - o Suitability Analysis to identify suitable areas for reconstruction and future development.
  - Landslide Susceptibility Analysis utilizing NC Geological Survey data to identify areas prone to landslides based on factors like aspect, slope, geology, and soil type.
- The Statistical Analysis may include:
  - Descriptive Statistics calculating the total number of damaged buildings or the average flood depth and width.
  - o Correlation Analysis correlating flood damage with elevation or land use type.
  - o Regression Analysis predicting flood damage based on rainfall intensity and land use.



- The Qualitative Analysis will be based on the information learned through the Public Engagement Process from interviews, survey responses, as well as the stories and personal accounts to understand the social impacts of the hurricane.
- Synthesis and Integration
  - o Combining Quantitative and Qualitative Data integrating statistical and spatial data with qualitative findings to provide a comprehensive understanding of the impacts.

<u>Client Responsibilities</u>: County GIS department to seek out and provide all available GIS data (remote sensing data). A data request will be provided by Equinox within 14 days of receiving a signed contract with the expectation that the County will provide the requested GIS data within 30 days of the data request. Data that cannot be provided by the County for Task 3 would be considered an additional service if Equinox is required to obtain and process the data.

# Task 4: Public Engagement Plan & Communications

Our team understands that a thoughtful public participation process will be essential for the success of the recovery plan and that the public engagement will be directed by Henderson County with support from the Equinox Team. Prior to conducting public engagement, Equinox will work with Henderson County to develop, review and solidify a Public Engagement Plan based on a desire to understand the community fabric, challenges, knowledge/data gaps, and range of desired outcomes/priorities. We do understand that the County will conduct various outreach activities and Equinox will support those efforts. The Equinox Team does feel that it is important that Equinox and Henderson County provide the following guiding principles.

- 1. Meet people where they are.
- 2. Be holistic and accommodating.
- 3. Target communication but also use multiple methods.
- 4. Be transparent and responsive about our process and what we have heard.
- 5. Let community members know up front when and how their feedback will be used.
- 6. Try to meet a community need while asking for their participation in a meeting or other event.

The Equinox Team is prepared to deliver a community engagement strategy that maximizes participation and impact. We are experienced community engagers; we are well versed in traditional methods as well as innovative approaches to reach community members. Due to the circumstances in the community, we are not proposing a set community engagement plan but instead we have allocated 84.5 hours and with a cost not to exceed in which we can assist Henderson County. The following are ways we can support Henderson County.

- Participate in two (2) community meetings. One at the beginning of the project and one toward the end of the project. Meetings can be organized to meet multiple goals such as having a representative talk about NCDOT progress while presenting findings from the analysis and sharing the community survey. Community meetings could include topic-specific and invited speakers.
- Provide materials for the community meetings such as maps and illustrations.
- Help Henderson County craft a community survey.



- Provide recommendations for potential stakeholders, including the Community Partners Group.
- Facilitate phone or virtual conversations with residents and business owners within the communities in the Gorge.
- Facilitate one-on-one conversations within the community.
- Conduct a ½ day workshop in which a specific project is a focus for the community that would result in the development of a preliminary concept. Could also include a community mapping component to the workshop
- Facilitate focus groups, listening sessions
- Public exhibits with feedback boxes
- Provide a StoryMap specially for the community to be able to learn and stay informed about the recovery plan.
- Provide content for the Henderson County Website
- Provide a Pop-Up Booth at an existing event

Once our team and Henderson County hears from a diverse subset of the general public, we'll begin to identify the barriers and opportunities and start to develop a path to recovery for the landscape and the community as a whole. The sentiments of the community members are vital to guiding the plan development.

<u>Client Responsibilities:</u> County staff will lead the community engagement process in consultation with the Equinox Team. The County will be prepared to conduct the various public outreach activities and send out community surveys.

# Task 5: Client, Steering Committee, and Stakeholder Communications (including Project Management)

- Provide project management and oversight.
- Conduct regular meetings with staff (twice per month).
- Assist facilitation of Community Partners Group Meetings (up to five total).
- Provide presentation materials for County Staff to present to Boards and Committees on plan development progress.
- Communications with stakeholders such as NCDOT and the Lake Lure sewer system.

#### Task 6: Recommendations & Prioritization

(Develop policies, actions, and an implementation plan)

- Specific Considerations for Hickory Nut Gorge may include:
  - o Steep Slopes and Landslides: Prioritize data collection and analysis related to landslide risk.
  - o Riverine Systems: Focus on the impact on the Rocky Broad River and its tributaries.
  - o Tourism and Recreation: Assess the impact on tourism-related businesses and recreational areas.
- Will include identifying and aligning eligible funding sources to support prioritized projects. This includes
  aligning with the eligibility requirements for each target program operated by FEMA, HUD, USDA, FHWA,
  State and USACE, etc. Cost share and timing are critical considerations in leveraging these programs along
  with an approach to manage compliance.



# Task 7: Development of Recovery Plan

A basic summary document will be crafted that addresses the following:

- Natural Resources, Resiliency, and Hazard Mitigation The plan will lay out steps for increasing resiliency in rebuilding, new development, or buyouts. Care will be taken in long-range planning and recovery projects that can help build resilience through mitigation of streambank erosion, landslides and hardening for key utilities (Water/Sewer/Power/Communications), roads and bridges, and key services such as healthcare, fire/ambulance response, county public works, education, administrative facilities, and emergency shelters/key logistics points with an all-hazards view of optimizing design criteria.
- **Economic Development** This may include general analysis for projected job growth and tourism pressures, and new outdoor recreation opportunities. This may include river conceptual designs that may recommend restoration and river access points. We also understand the need to create opportunities and capacity for beneficial use of forestry products to drive opportunities for builders, craftspeople, artisans, and other users of wood fiber and related products. Part of this includes a transportation road system to support various economic and recreation activities safely and in a cost-effective manner.
- Land Use This may include historic preservation, agricultural preservation, conservation easements, and analysis of areas where zoning can be changed to enhance the natural progression of land use. This includes consideration of existing building codes and possible improvements to promote resiliency. For new buildings and/or developments, ensuring adequate and timely code enforcement will be considered and is a recognized lesson learned in many post-disaster after-action reports. We understand the challenges uninsured and underinsured owners face and will take that into consideration in all recommendations.
- **Transportation** Inclusion of how the new roadways may impact the area regarding land use, etc. Opportunities for bike/ped infrastructure, multi-use path, and/or river path, if applicable, based on public comment.
- Public Health Based on public comment and opportunity, we can make recommendations to the County regarding consideration of extending utilities into this area and how they could accomplish this. We will work to understand the current utility infrastructure (Water, sewer, power, and comms) to gain an understanding of areas of risk and prioritize improvements to increase resiliency. We can collaborate with owners and agencies to develop appropriate strategies to either harden or affect quick repair. Included in public health is the consideration of a resilient emergency agencies communication system to enable citizens to connect to first responders and critical services. To be consistent with best practices, part of this new system may include an early warning system to address all hazards including wildfire, flooding, ice storms, utility interruptions and geohazards/mudslides. This system could employ stream gauges, weather stations and wildfire detection equipment to affect early detection of possible issues and on-going monitoring.



• Stakeholder & Community Engagement - Provide a summary of the result of the public engagement.

<u>Client Responsibilities:</u> Timely Review of draft plans.

#### **ADDITIONAL SERVICES**

Any service or task not described above will be considered an additional service. Examples of additional services include hydrologic modeling, vulnerability assessment, scenario development, assessment of economic losses, and data collection that cannot be provided by the County and requested by the County for the project.

### **COMPENSATION**

Equinox will contract with Henderson County (Client) for the above scope of services for a fixed fee of \$162,214. Please note, for Task 4: Public Engagement Plan & Communications, up to 84.5 hours have been allocated to this task to work with the County and to provide maximum flexibility. Client agrees to pay each monthly installment of Compensation within thirty (30) days of being invoiced for the monthly installment amount, which amount shall be representative of the percentage of the total Services performed during the invoice period. Interest at the rate of 3.5 % per month shall accrue on all invoices not timely paid. If payment is not received within 45 days all work will be halted until payment is received in full, which will include payment of all past invoices.

Task	Cost Estimate
Task 1. Project Discovery: Download / Kick-off / Vision & Goal Setting	\$5,802
Task 2: Inventory & Assessment	\$20,850
Task 3: Data Collection & Analysis	\$50,994
Task 4: Public Engagement Plan & Communications (up to 84.5 hours)	\$22,845
Task 5: Client, Steering Committee, & Stakeholder Communications	\$22,747
Task 6: Recommendations & Prioritization	\$14,226
Task 7: Development of Recovery Plan	\$24,750
Cost Estimate	\$162,214

## Community Partners Group

Staff recommend that the Board of Commissioners call for applications from interested citizens who live, work, or own property within the study area to serve on a Community Partners Group. This nine-member group will help guide the recommendations of the draft recovery plan before it is presented to the Board for consideration. This group will be active during the planning process and will need Board approval to continue after plan adoption if desired.

Staff also suggests selected ex-officio members who are key to the development of the plan. These members may appoint a representative if they have scheduling conflicts with any planned meetings. If the Board is in agreement with this approach, appointments of the nine members to the Community Partners Group can be made at the May 21<sup>st</sup> meeting. Staff will notify the public that the County is accepting applications to the Community Partners Group.

Type	Name	Affiliation
Ex-Officio	Chief Jay Alley	Gerton Fire Department
Ex-Officio	Chief Stephen Freeman	Bat Cave Fire Department
Ex-Officio	Victoria Cortez	Emergency Management
Ex-Officio	Marcus Jones	Engineering
Ex-Officio	Troy Wilson	NCDOT Division 14
TBD Appointees 1 - 9		

