

**STATEMENT OF OBJECTIVES**  
**RECREATIONAL BOATING SURVEY IN THE STATE OF TEXAS LOCATED AT**  
**GRAPEVINE LAKE IN TARRANT AND DENTON COUNTIES**

Article III, (D) of the following Cooperative Ecosystems Studies Units (CESU)  
Desert Southwest, Great Plains, Gulf Coast

**Revised 26 May 2021, Changes Highlighted**

**1.0 PURPOSE**

**1.1** Grapevine Lake's environmental programs ensure Civil Works mission activities are conducted in compliance with all applicable environmental laws, regulations, and policies. Article I B of the master agreement states the objectives of the CESU are to: provide research, technical assistance, and education to federal land management, environmental and research agencies and their potential partners; develop a program of research, technical assistance and education that involves the biological, physical, social sciences needed to address resource issues and interdisciplinary problem-solving at multiple scales and in an ecosystem context at the local, regional, and national level; and place special emphasis on the working collaboration among federal agencies and universities and their related partner institutions.

**1.2** In agreement with the above stated objectives, the recipient/cooperator agrees to provide the necessary personnel, equipment, and materials required to conduct a Recreational Boating Survey (RBS) at Grapevine Lake located in Tarrant and Denton counties, Texas, contingent on lake elevations being conducive to boating activities. Services include close coordination with the US Army Corps of Engineers (USACE), Fort Worth District Project Manager (SWF PM), key USACE personnel in the Regional Planning and Environmental Center (RPEC) in Fort Worth District, and the USACE Lake Manager at Grapevine Lake. The recipient/cooperator agrees to accomplish the following general tasks at Grapevine Lake:

- Utilization counts at boat ramp parking lots (including unauthorized parking).
- Marina slip occupancy counts at existing marinas.
- Empty boat trailer counts in all campgrounds.
- Empty boat trailer counts in designated day use areas where appropriate.
- On-the-water vessel counts at specified times and locations.
- Conduct boat ramp exit surveys at specified boat ramps at specified times and locations.
- Administer the Marina Tenant and Stakeholder surveys.
- Preparation of a report summarizing the count and survey data.

**1.3** The work requires onsite personnel to be physically present at Grapevine Lake during the time required to perform the survey.

## **2.0 AUTHORITY**

**2.1** In accordance with section 6305 – Using cooperative agreements of the Federal Grant and Cooperative Agreements Act of 1977 (31 U.S.C. § 6301 et seq.), all CESU projects must carry out a public purpose of support or stimulation, instead of acquiring goods or services for the exclusive direct benefit of the United States Government.

**2.2** In agreement with the above stated goals, the recipient/cooperator agrees to provide the necessary personnel, equipment, and materials required to implement, in part, the U.S. Army Corps of Engineers - Fort Worth District responsibilities pursuant to the section 6305.

**2.3** In accordance with section 6305 – *Using cooperative agreements* of the *Federal Grant and Cooperative Agreements Act of 1977* (31 U.S.C. § 6301 et seq.), substantial involvement is expected between the Department of Defense (DoD) and the recipient when carrying out the activity contemplated by the cooperative agreement. The DoD agrees to participate at a national level in support of the CESU program as accepted in the Master Memorandum of Understanding (MOU) for the establishment and continuation of the CESU program Article II 1-4 and Article VI 1-7.

The Fort Worth District (hence DoD) further agrees to provide substantial involvement as directed under the above listed Article II (A) CESU Master Agreements. Specifically, USACE staff at Grapevine Lake and staff members within the Regional Planning and Environmental Center (RPEC) and Operations Division, Fort Worth District will provide administrative assistance, as appropriate and necessary to execute this Agreement and subsequent modifications, and will provide further cooperation in the following areas:

- Technical assistance and guidance.
- Close monitoring during performance.
- Involvement in technical decisions, such as methodology.
- Participation in status meetings, including kick off meeting.

### **3.1 Grapevine Lake, Texas RBS**

#### **3.1.1 Conduct Kickoff Meeting**

The goal of this task is to ensure the recipient/cooperator, the Regional Planning & Environmental Center (RPEC), and Fort Worth District Operations Division staff understand the purpose and process of the RBS and the timeline for accomplishing the overall tasks.

- Conduct kick-off meeting with Fort Worth District Operations Division and RPEC Master Planning staff at Grapevine Lake.

- Discuss and confirm the count and survey process, schedule, and deliverables, and conduct a site visit.
- Prepare a preliminary work plan for conducting the RBS at Grapevine Lake.
- Review government furnished material.

*See section 8.2 for detailed description of Deliverable 2 for Task 1.*

### 3.1.2 Monthly Report of Status

Monthly project status reports will take place via teleconference between the 1<sup>st</sup> and 5<sup>th</sup> day of each month during the period of performance. Project delays and progress shall be reported as well as any other potential issues which may arise with the RBS. USACE staff will initiate the teleconference calls.

### 3.1.3 Conduct Recreational Utilization Counts

Recreational utilization counts to be conducted at official boat launching ramps, all camping areas and select day use picnic areas, commercial marinas, private marinas, and on the lake water surface.

### 3.1.4 RBS Locations

Recreational utilization counts to be conducted at the following locations on Grapevine Lake:

#### **Boat Ramps:**

At each of the official boat launching ramps. There are approximately 15 ramps at Grapevine Lake including: Katies Woods Ramp, Murrell Park Ramp, The Vineyards Ramp, Twin Coves Ramp, Meadowmere Ramp, Sand Bass Point Ramp, Tarwick Ramp, Lakeview Park Ramp, Trophy Club Park Ramp, McPherson Slough Ramp, Silver Lake Ramp, Dove Loop Ramp, Farris Branch Ramp and the members only ramps located at Silver Lake Marina and Scott's Landing Marina. Approximately two ramps are undergoing repairs and may not be open for public use during the RBS.

#### **Campgrounds and Day Use Areas:**

At each of the following camping areas: The Vineyards Campground operated by the City of Grapevine and Twin Coves Park operated by the City of Flower Mound. Note: Day use areas and camping areas exist at Twin Coves Park where empty boat trailers may be parked and must be included in counts.

#### **Water Surface:**

On-the-lake water surface counts using boats with each boat being assigned to a water surface zone as indicated on the map to be finalized at the kickoff meeting

prior to initiation of survey activities. Two (2) on-the-lake water surface counts to be conducted at Grapevine Lake on each survey day at 1:30 PM and 4:30 PM.

### **Commercial and Private Marinas:**

There are three commercial marinas on Grapevine Lake as follows: Silver Lake Marina, Scott's Landing Marina, and Twin Coves Marina. Private marinas include the Northshore Club marina, Lake Forest Boat Club marina, Grapevine Yacht Club and High Ridge Boaters Association and are included as locations for recreational utilization counts.

#### **3.1.5 RBS Dates**

Three (3) survey days of recreational utilization counts are to be conducted at Grapevine Lake at all designated RBS locations. The range of possible dates begins June 12, 2021 and ends September 5, 2021 (Labor Day Holiday).

The counts are to be conducted on one (1) Saturday, one (1) Sunday and one (1) Federal Holiday on three (3) distinct weekends. Concurrent Saturday/Sunday counts are not allowed.

Note: Counts may not be conducted on Monday, July 5, 2021 or Monday, September 6, 2021. If counts are conducted on Sunday, July 4, 2021 or Sunday, September 5, 2021 (both Federal Holidays) then counts may not be conducted on Saturday, July 3, 2021, or Saturday September 4, 2021. If weather conditions or schedule delays occur due to a late Agreement approval that prevent counting on July 4, the USACE reserves the option to require counting on a Saturday or Sunday following July 4 in lieu of counting on September 5 (the Labor Day Holiday).

#### **3.1.6 RBS Times**

The recreational utilization counts at Grapevine Lake are to be conducted at the following times during each survey day at each of the designated RBS locations:

- 12:00 PM, 3:00 PM, and 6:00 PM (at boat ramp parking lots, campgrounds, and specified day use areas)
- 1:30 PM and 4:30 PM (on-the-water vessel counts)

#### **3.1.7 RBS Conditions**

Recreational utilization counts shall be conducted only if the following lake/weather conditions permit:

- Only when weather conditions are conducive to recreational boating.
- Only when rain is to be at or below a 20% chance or not in the forecast by the National Weather Service.

- Only when winds are forecast to be at or below 15 miles per hour.
- If any weather condition (rain, lightning, or wind) is not favorable, then the recreational utilization survey data collection day is canceled, and another day is added to the data collection calendar, subject to government approval. The decision to cancel a possible collection date will be based on the National Weather Service forecast and will be made by USACE no later than 12:00 PM on the Monday before any possible collection date
- The elevation of Grapevine Lake is greater than 525.0 feet and less than 545.0 feet. USACE will provide lake elevation information. The “normal” or conservation pool elevation of Grapevine Lake is 535.0 feet.

NOTE: If some data collection times were completed before weather conditions became unfavorable, or due to unforeseen technical and/or personnel difficulties, and the data collection was terminated for that day, then another day (a Saturday or Sunday) would be added to the collection days and data collection would begin where the former day had ceased in terms of the 3 time slots identified for data collection each day.

### 3.1.8 RBS Protocol

The following standard operating procedures are to be followed prior to initiating data collection on days and times specified above:

- A USACE representative must give approval to proceed with the surveys no later than 12:00 PM on the Monday prior to each survey day. This will allow approximately five (5) days notice prior to recipient/cooperator making travel plans and arrangements for counting/surveying staff to be in place. USACE point of contact will be provided upon award of the cooperative agreement.
- If both lake and weather conditions remain favorable (within specified guidelines), all data collection team members will be notified to be prepared to proceed with data collection at designated RBS locations.
- Prior to the recipient/cooperator traveling to Grapevine Lake for each scheduled survey date, an assessment of the lake and forecasted weather conditions are to be made by both the Government and the recipient/cooperator to determine if conditions are favorable to conduct the survey. If both lake and weather conditions remain favorable, all data collection team members are notified to begin data collection at designated RBS times. If both lake and weather conditions are within the specified guidelines, the data collection team members are to begin data collection.
- Data collection at all designated boat ramps as indicated in the *RBS Locations* (Section 3.1.4), to include the number of empty boat trailers parked in both designated trailer parking spots and in locations that are not officially designated trailer parking spots (such as grassy area or along the road leading to the boat ramp). The recorded information should

denote how many vessels each empty trailer is designed to carry (some trailers are designed to carry multiple personal watercraft). The number of vessels that are actively being launched or are waiting in line to launch (and the trailer has not yet been parked) should also be recorded. The recorded numbers should differentiate between trailers that are parked in designated and undesignated parking areas.

- Data collection at the campgrounds indicated in the *RBS Locations* (Section 3.1.4) should include the number of empty boat trailers parked at or near campsites within all designated camping areas. The assumption is that these empty trailers indicate that the boat owner has launched a boat at a nearby boat ramp and then parked the empty trailer at a campsite.
- On the lake water surface data collection to be conducted from a boat(s) positioned on the lake as specified in the *RBS Locations* (Section 3.1.4) listed above (zones if any) to be determined during kickoff meeting. As noted, *RBS Locations* (Section 3.1.4) above, other methods of counting on-the-lake vessels may be appropriate if approved by USACE. Data collection should include counting all vessels by vessel type moored or underway on the lake surface. Vessels will be indicated as motorized (runabouts, personal watercraft (jet-ski's), pontoon, etc.), sailboat, and non-motorized (kayaks, paddle boards, etc.) As vessels are counted note the location and type of each vessel on a lake map. Using a lake map denote where moving vessel congestion is the most prevalent and record the number of vessels by vessel type within the congested area. Also record on a lake map any areas where vessels are moored close together in groups of approximately ten (10) or more. Counts should proceed quickly to capture the number of vessels on the lake surface at the prescribed times and to prevent double counting.
- Data collection at the marinas indicated in the *RBS Locations* should include the total number of slips and the total number of empty wet storage slips or spaces. The total number of slips shall include the floating platforms intended for the storage of personal watercraft and shall also include the slips used for rental vessels. The count should also include the number of vessels that are moored in areas that are not designated slips (for example some vessels may be tied up (moored) on the side(s) of a floating dock but are not moored in a designated slip). The counting should proceed at a fast pace, so the count is accurate and captures all empty slips/storage spaces at the time of the count.

Two marinas have dry boat storage spaces that may result in boat launches by individual boat owners or by marina staff via a livery service. Some or all these launches may result in empty trailers parked near the marina-operated boat ramp, but some empty trailers may be parked in a dry storage space. Coordination with the commercial marina staff is required of the recipient/cooperator to determine approximately how many boats are launched on RBS dates via a livery service where the empty

trailer is parked in a dry storage space and would therefore not be counted during the required counts at the boat ramp. Coordination is also needed to ensure that the recipient/cooperator will be granted access to floating facilities to conduct counts of empty slips. Occupancy rates (to be provided voluntarily by the marina) of rented slips during count days should be collected as well. Occupancy rates are needed to convert the total number of empty slips to “empty rented slips”. Occupancy rates are to be included in draft and final reports (see Section 3.1.11 and 3.1.12) but will not be made publicly available by USACE.

- When all counts have been recorded for the specific area, the recipient/cooperator is to move to the next location for data counting. Representative photos are to be taken on the lake surface and at all RBS locations during the count/survey periods. Digital copies of the photos to be provided by the recipient/cooperator with a digital time stamp, GPS coordinates, and the file will be labeled according to location and time.

### 3.1.9 Conduct Boater Exit Interview Surveys

Exit interviews are to be conducted at all boat ramp locations specified below, using the attached Boat Ramp Exit Survey (see Attachment 1). Interviews to be conducted between 4:00 PM and 7:00 PM on each of the RBS days. Exit interviews should not delay the public’s ability to retrieve their boats or cause traffic congestion. Not every boat exiting the water during the specified timeframe will be asked to participate in the survey if delays are occurring at the ramp. Recipient/cooperator must be prepared to have a spanish-speaking (bilingual) surveyor available if the exit survey process at any of the designated boat ramp locations indicates a need for a bilingual surveyor.

Exit interview survey locations at Grapevine Lake include the following: Meadowmere Park Ramp, Dove Loop Ramp, Katie’s Woods Ramp, Murrell Park Ramp

*See section 8.3 for detailed description of Deliverable 3.*

### 3.1.10 Stakeholder and Marina Tenant Surveys

The recipient/cooperator is required to conduct surveys for two groups as follows:

#### **Stakeholder Surveys:**

Using a contact list to be furnished by USACE (see Section 5, Government Furnished Material), a stakeholder survey will be completed using a pre-approved survey form (see Attachment 2 for the Stakeholder Survey). The survey may be administered using standard mail, email or via a website. If standard mail is used, the recipient/cooperator must provide a prepaid return

postage envelope to each stakeholder. The survey must be administered during the time specified for the RBS in Section 3.1.5 of this SOO.

**Marina Tenant Surveys:**

In order to protect Personally Identifiable Information (PII), the pre-approved Marina Tenant Survey (see Attachment 3) must be made available to marina tenants via a methodology to be chosen by the marina owner/operator. This methodology may involve sending the survey to marina tenants via email or having marina tenants answer the survey using a web-based survey process. In either case, the resulting, completed surveys should be furnished to the recipient/cooperator by marina tenants during the time specified for the RBS in Section 3.1.5 of this SOO. Under no circumstances should PII, such as names and addresses, be collected or stored by the recipient/cooperator. Completion of the Marina Tenant Survey will require close coordination between the recipient/cooperator and the marina owner/operator. The three marinas at Grapevine Lake are owned and operated by a single entity which should simplify coordination. There are approximately 1,500 total rentable wet slips at the three commercial marinas on Grapevine Lake, and approximately 121 total wet slips at the four private marinas. A minimum of 500 marina tenant surveys, spread approximately equally across the three commercial marinas, should be attempted to complete this task. No marina tenant surveys are to be sent to private marina slip occupants.

Upon mailing or emailing, the recipient/cooperator is to notify USACE of the number of surveys that have been mailed and the dates in which they were mailed/made available to potential respondents. The recipient/cooperator is to provide copies of all the returned surveys to government. To increase respondent percentages, the recipient/cooperator shall send a reminder to all potential respondents who have not responded after 15 calendar days following the initial mailing/availability of the survey. The respondents have 30 calendar days to respond.

*See section 8.4 for detailed description of Deliverable 4.*

**3.1.11 Draft Summary Report**

The recipient/cooperator is to prepare a draft report summarizing all data collected. The report should display data in a manner that clearly and graphically displays the data collected for each survey day and each location specified in the RBS. The draft report should also provide a clear summary and statistical trends of the exit interview surveys, stakeholder surveys and marina tenant surveys. The boater exit interview surveys shall be summarized for each boat ramp location by date and as an aggregate summary for each lake. The data is to be reported to the government without any recommendations or suggestions for future use. It will be the government's responsibility to analyze the furnished data for future management decisions. The format of the draft summary report

will be both hardcopy and electronic PDF format. Source data to include, but not limited to Adobe PDF, Microsoft Word, and Excel.

*See section 8.5 for detailed description of Deliverable 5.*

#### 3.1.12 Final Summary Report

The recipient/cooperator to prepare a final summary report summarizing all data collected and incorporating government comments, if any, on the draft report. The format of the final summary report will be both hardcopy and electronic PDF format. Source data to include but not limited to Adobe PDF, Microsoft Word and Excel.

*See section 8.6 for detailed description of Deliverable 6.*

## 4.0 QUALIFICATIONS

### 4.1 Principle Investigator

The principle investigator for the RBS should have experience related to conducting surveys with the public, preferably related to outdoor recreation and boating. All other personnel performing this RBS should be experienced in this type of work with the supervision of the principle investigator.

### 4.2 Watercraft Operation

The recipient/cooperator is required to conduct water surface boat counts and may conduct this task from a watercraft. It is the responsibility of the recipient/cooperator for all personnel required to operate a watercraft to obtain all certifications required by the State of Texas for the safe and lawful operation of watercraft. Watercraft will not be provided by the government.

Recipient/cooperator is responsible for obtaining watercraft for use. For more information regarding the boating laws and regulations in the State of Texas the following link is provided:

[https://tpwd.texas.gov/faq/learning/boater\\_education/index.phtml](https://tpwd.texas.gov/faq/learning/boater_education/index.phtml)

The following are not State of Texas boating laws but USACE recommendations for safe boating operation:

- No one under 18 years of age in the survey vessel.
- Operator must be 21 years of age.
- Recipient/cooperator must show proof of boating liability insurance for each vessel on the water.
- All persons in a vessel must wear a US Coast Guard approved Personal Flotation Device (PFD) when on-board the survey vessel.

## 5.0 GOVERNMENT FURNISHED MATERIALS OR PROPERTY

## 5.1 Physical Data

Government furnished physical data are to be made available to the recipient/cooperator to include but not limited to previous recreation boating surveys, listing of marina owners/operators and stakeholders, and GIS data layers if needed.

## 5.2 Facility

Government furnished facilities are to be available to the recipient/cooperator to use as a base for conducting the recreational boating surveys to include the USACE lake project office.

## 5.3 Office of Management and Budget (OMB) Approved Surveys

The government will provide the recipient/cooperator with three OMB approved survey forms including:

- Boat Ramp Exit Survey, (Attachment 1)
- Mail-Back Boating Surveys (Stakeholders), (Attachment 2)
- Mail-Back Boating Surveys (Marina Tenants) (Attachment 3)

## 6.0 PERIOD OF PERFORMANCE

The period of performance is from award through 31 December 2021.

## 7.0 COORDINATION

CESU Coordination: Jason G. Harrison, Fort Worth District, 817-266-3001, [jason.g.harrison@usace.army.mil](mailto:jason.g.harrison@usace.army.mil)

RPEC Coordination: Donald N. Wiese, Fort Worth District, 817-886-1568 [donald.n.wiese@usace.army.mil](mailto:donald.n.wiese@usace.army.mil)

Grapevine Lake Project Office: John Mathney, Grapevine Lake Manager, 817-865-2612, [john.l.mathney@usace.army.mil](mailto:john.l.mathney@usace.army.mil)

## 8.0 DELIVERABLES

### 8.1 Deliverable 1

Progress Reports - One (1) typed letter report describing progress on the project. The report is due as of the last day of the month (**monthly**) and may be

transmitted via electronic mail, facsimile, or regular mail no later than the 10th calendar day following the end of the reporting period. Invoices for partial payment should be submitted to coincide with receipt of the monthly progress reports. No partial payment will be approved unless the government has received all progress reports which are due.

## 8.2 Deliverable 2

Conduct kickoff meeting and prepare a Work Plan due within 15 workdays after the kickoff meeting. Kickoff meeting to be held within 20 calendar days of issuance of Cooperative agreement. USACE staff will provide comments, if any, within 10 workdays after receipt.

## 8.3

### Deliverable 3

The recipient/cooperator to provide a separate status report for each survey collection trip to include detailing the number of interviews conducted at each interview location within 5 workdays after the close of each scheduled collection date. USACE staff will provide comments, if any, within 10 workdays after receipt.

## 8.4 Deliverable 4

The recipient/cooperator to provide a status report for each lake detailing the number of surveys mailed and the dates in which they were mailed within 5 workdays of completing mailings.

## 8.5 Deliverable 5

The recipient/cooperator to provide a digital copy (PDF) and three (3) hardcopies of the draft summary report within 30 calendar days of the last collection date. USACE staff will provide comments, if any, within 10 workdays after receipt.

## 8.6 Deliverable 6

The recipient/cooperator to provide a digital copy (PDF) and five (5) hardcopies of the final summary report within 10 workdays after receipt of government comments. The recipient/cooperator will provide all source and supporting miscellaneous data including all photographs in digital format within 5 workdays after the final draft report is completed. All hardcopy and electronic copies of completed survey forms including boater exit interview surveys, mail out surveys, on-water boat counting forms and forms used to count empty trailers at boat ramps and empty slips at the marina shall become the property of the government and may not be used by the cooperator for any purpose.

**9.0** This cooperative agreement may be administered through a CESU only upon mutual agreement and official authorization by both parties of the acceptance of the application of the CESU Network IDC rate (17.5%).

Any resulting cooperative agreement will be subject to and recipient/cooperator shall comply with 2 CFR 200.313 "Equipment", 200.314 "Supplies", and 200.315 "Intangible Property" which includes use of research data.

[End of SOO]