

Contract Number 223280
CFDA Number 15.615

THE STATE OF TEXAS

INTERAGENCY COOPERATION CONTRACT

COUNTY OF TRAVIS

This Contract is entered into by and between the State agencies shown below as Contracting Parties, pursuant to the authority granted and in compliance with the provisions of "The Interagency Cooperation Act", Chapter 771 of the Texas Government Code.

I. CONTRACTING PARTIES:

The Receiving Agency: Texas Parks and Wildlife Department (TPWD)
The Performing Agency: The University of Texas at Tyler (UT Tyler)

II. STATEMENT OF SERVICES TO BE PERFORMED:

UT Tyler shall conduct the project entitled "Surveys for Threatened and Endangered Mussels and Fishes in Rivers of Northeastern Texas" as per proposal attached hereto as Attachment A and incorporated herein for all purposes. The objective of this study is to overall objective is to obtain a database of information on the occurrence of rare species of mussels and fish throughout the extent of the rivers of the northeast Texas region.

All publications arising from this research shall acknowledge TPWD, as well as **Section 6**, or such fund as may supersede it in funding this project.

All data and analyses resulting from this project, and all information regarding the project, becomes the joint property of TPWD and UT Tyler, and will be presented to TPWD in an electronic format determined by TPWD upon request, and not later than August 31, 2012. TPWD agrees to refrain from publishing any results or analysis of this study for four (4) years after the termination date of contract, after which TPWD may publish with no restriction.

With respect to such Intellectual Property as is (i) incorporated in the Work, or (ii) produced by UT Tyler or UT Tyler employees, subcontractors, or subcontractor's employees during the course of performing the Work, UT Tyler hereby grants to TPWD, subject to the terms of this Contract, a nonexclusive, perpetual, irrevocable, enterprise-wide license to use, copy, publish, and modify such Intellectual Property, and allow others to do so for TPWD purposes. UT Tyler shall secure all necessary intellectual property licenses from third parties and warrants that the Work and the intended use of the Work will not infringe upon any property rights of any third party.

Equipment and supplies purchased under this Contract shall be used, managed, and disposed of in accordance with the Texas Uniform Grant Management Standards (UGMS). Property records must be maintained on all capitalized or controlled property and equipment that include a description of the property, a serial number or other identification number as provided by State Property Accounting (SPA), the source of the property, who holds title, the acquisition date, and cost of the property. These records must be provided to TPWD at time of acquisition. At least every two years and/or at project closeout a physical inventory of the property must be taken and the results reconciled with property records. TPWD will determine appropriate disposition of such property in accordance with UGMS.

Landowner Permission: In accordance with 12.103 of the Texas Parks and Wildlife Code, the UT Tyler acknowledges that any work to be performed on private lands in Texas using these funds requires that grantees secure written permission from the private landowner(s) for the purposes of (i) access to the land, and (ii) use of data collected on that land. As such the Landowner Permission for Wildlife Research Form (PWD-193A), is attached hereto as Attachment B, and is incorporated herein for all purposes.

Data collected for rare, threatened, and endangered species: All raw data shall be submitted along with the

required interim and final reports. All observation data shall, at a minimum, include unbuffered GPS coordinate information, or preferably, shall be submitted as a projected GIS shapefile. All such data submitted will be entered into the Texas Natural Diversity Database. Data specific questions may be addressed to: txndd@tpwd.state.tx.us.

UT Tyler shall submit following guidelines provided by TPWD **(1) Interim Performance Reports on or before 30 September 2011**, and **(2) a Final Report on or before 31 August 2012**. The Reports shall then be forwarded to U. S. Fish and Wildlife Service (USFWS, Austin) for review and comments. TPWD will send revisions requested by USFWS, Austin, to the Principal Investigator for UT Tyler, who shall respond to TPWD in writing within sixty (60) days of receipt of revision request.

III. BASIS FOR CALCULATING REIMBURSABLE COSTS:

See Budget in Attachment A for details.

Allowable costs are restricted to those that comply with UGMS and additional state and federal rules and law. The Parties agree that all the requirements of the UGMS apply to this Contract, including the criteria for allowable costs. Additional federal requirements apply when federal funds are included in the reimbursement.

The performing agency may make adjustments up to five percent (5%) within cost categories without prior approval from TPWD, provided that the total reimbursable costs do not exceed total annual costs.

Expenditures for travel and travel-related expenses will be reimbursed at the official rate authorized by the State of Texas.

The cost of materials and supplies should be charged at their actual prices. Proper documentation is required for reimbursement.

Reimbursements are conditioned on the Contract activities being performed in compliance with the Contract.

IV. CONTRACT AMOUNT:

The total amount of this Contract shall not exceed: \$75,000.00 (Seventy five thousand dollars) with a minimum match requirement of \$25,000.

Budgeted monies not spent in a given fiscal year may not be eligible to be rolled over to the following fiscal year(s).

Fund availability for this contract is dependent on a funding source which is approved on a fiscal year (9/1 – 8/31) basis. Consequently, this contract is subject to cancellation, without penalty, either in whole or in part, if those funds are unavailable, to TPWD.

V. PAYMENT FOR SERVICES:

Receiving Agency shall pay for services received from appropriation items or accounts of the Receiving Agency from which like expenditures would normally be paid, based upon vouchers drawn by the Receiving Agency payable to Performing Agency.

For payment purposes, the Performing Agency (agency receiving payment) shall submit to the Receiving Agency (agency making payment) an invoice with the Performing Agency's RTI (for funds transfer at the Treasury) or a Purchase Voucher (for deposit in local bank account). The Receiving Agency will enter payment information into USAS.

Payments received by the Performing Agency shall be credited to its current appropriation item(s) or account(s) from which the expenditures of that character were originally made.

Any excess costs over the TPWD contribution toward one awarded contract cannot be submitted for reimbursement against another contract.

Twenty percent (20%) of Federal Share, or \$15,000.00, will be held until receipt and acceptance of final report by TPWD.

VI. INVOICING:

Payments for service performed shall be billed: Monthly.

INVOICES WILL BE SENT TO:

Dr. C. Craig Farquhar
Wildlife Division
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Invoices shall include details of work completed during the invoices period. Backup documentation must be submitted for both the contract expenses incurred and the match amounts. Cost share must be documented on each invoice. A sample Invoice with match documentation is attached hereto as Attachment C.

If the invoice or backup documentation is not complete it will delay the processing of your invoice.

The entire match amount must be obligated by the end of the period of performance or the performing agency risks a proportionate reduction in the amount of federal funds awarded under this Contract. If Performing Agency does not meet the match requirement of this agreement, the amount of federal funds to be disbursed will be proportionately lowered or, if already disbursed, a refund of federal funds will be required.

All invoices and reports must be received within 60 days of end of each fiscal year or termination of contract. Invoices not received within this time frame may not be paid.

VII. CONTRACT ADMINISTRATION:

TPWD Project Coordinator

Craig Farquhar
Endangered Species Grants Coordinator
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744
512-389-4933 office
craig.farquhar@tpwd.state.tx.us

TPWD Contract Point of Contact

Tammy Dunham, CTPM CTCM
Contract Specialist
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744
512-389-4752 office
tammy.dunham@tpwd.state.tx.us

UT Tyler Principal Investigator

Dr. Neil B. Ford
Department of Biology
3900 Univ. Blvd
The University of Texas at Tyler
Tyler, TX 75799-0001
(903) 566-7249 office
Email: nford@mail.uttyl.edu

UT Tyler Contract Point of Contact

Sergio Padilla, CRA, Assistant Director
Office of Sponsored Research
3900 University Boulevard
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903-565-5670 office
903-565-5858 fax
spadilla@uttyler.edu

VII. TERM OF CONTRACT:

This Contract is to begin September 1, 2010 or upon signature by both parties, and
shall terminate 31 August 2012

An extension to this contract may be granted with prior written approval by TPWD. Any extensions shall be at the same terms and conditions, plus any approved changes.

This contract is subject to cancellation, without penalty, either in whole or in part, if funds are not appropriated by the Texas Legislature, or otherwise made available, to TPWD.

VIII. GENERAL TERMS AND CONDITIONS:

Definitions: As used throughout this contract, the following terms shall have the meaning set forth below:

- A. Capitalized Property is real or personal property that have an estimated life of greater than one year. A capital asset has a value equal to or greater than the capitalization threshold established for that asset type. In accordance with State Property Accounting (SPA) regulations
- B. Controlled Property is a capital asset that has a value less than the capitalization threshold established for that asset type, however due to its high-risk threshold, is required to be reported to SPA. The Comptrollers controlled assets list can be found online at: <https://fmx.cpa.state.tx.us/fmx/spa/classclosed/control.php>.
- C. Contractor shall mean that firm, provider, organization, individual or other entity performing service(s) under this contract, and shall include all employees of the Performing Agency.

Abandonment or Default: If the contractor defaults on the contract, TPWD reserves the right to cancel this Contract without notice. The defaulting contractor will not be considered in the re-solicitation and may not be considered in future solicitations for the same type of work, unless the specification or scope of work significantly changed. The period of suspension will be determined by the agency based on the seriousness of the default.

Amendments: This Contract may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

Audit: Performing Agency understands that acceptance of funds under this contract acts as acceptance of the authority of the State Auditor's Office, TPWD or any successor agency, to conduct an audit or investigation in connection with those funds. Performing Agency further agrees to cooperate fully with the above parties in the conduct of the audit or investigation, including providing access to any information the state auditor considers relevant to the investigation or audit. Performing Agency shall ensure that this clause concerning the authority to audit funds received indirectly by subcontractors through the Performing Agency and the requirement to cooperate is included in any subcontract it awards.

Disallowed Costs: The Performing Agency is responsible for any audit exceptions or disallowed costs incurred by its own organization or that of its Subcontractors.

Dispute Resolution: Any disputes arising from this agreement shall be resolved using Chapter 2260 of the Texas Government Code

TPWD may avail itself of any remedy or sanction provided in this Contract or in law to recover any losses arising from or caused by Performing Agency's substandard performance or any non-conformity with this Contract or the law.

Performing Agency shall carry on the Contract Activities and adhere to the progress schedule during all disputes or disagreements with TPWD unless ordered to stop the Contract Activities. No Contract Activities shall be delayed or postponed pending resolution of any disputes or disagreements.

Neither payment by TPWD nor any other act or omission other than an explicit written release constitutes a release of Performing Agency from liability for losses under this Contract.

Non-discrimination: The undersigned is subject to Title VI of the Civil Rights Act of 1964, Section 504 or Rehabilitation Act of 1973, Title II of the Americans with disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and offers all persons the opportunity to participate in programs or activities regardless of race, color, national origin, age, sex or disability. Further, it is agreed that no individual will be turned away or otherwise denied access to or benefit from any program or activity that is directly associated with a program on the basis of race, color national origin, age, and sex (in educational activities) or disability. The prime contractor shall ensure that this clause is included in all subcontracts.

Proprietary or Confidential Information: Contractor will not disclose any information to which it is privy under this Contract without the prior consent of the agency. Contract will indemnify and hold harmless the State of Texas, its officers and employees, and TPWD, its officers and employees for any claims or damages that arise from the disclosure by Contractor or its contractors of information held by the State of Texas.

Public Disclosure: Information, documentation and other material in connection with this contract may be subject to public disclosure pursuant to Chapter 552 of the Texas Government Code ("the Public Information

Act"). No public disclosures or news releases pertaining to this contract shall be made without prior written approval of TPWD.

Termination: This Contract shall terminate upon full performance of all requirements contained in this Contract, unless otherwise extended or renewed as provided in accordance with the contract terms and conditions.

Termination for Default: TPWD may, by written notice of default to the contractor, terminate this Contract, in whole or in part, for cause if the contractor fails to perform in full compliance with the contract requirements, through no fault of TPWD. TPWD will provide a thirty (30) day written notice of termination to the contractor of intent to terminate, and TPWD will provide the contractor with an opportunity for consultation with TPWD prior to termination.

Upon receipt of written notice to terminate, the contractor shall promptly discontinue all services affected (unless the notice directs otherwise) and shall deliver or otherwise make available to TPWD, all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the contractor in performing this Contract, whether completed or in process

Other Law: Performing Agency understands and agrees that by accepting money for services under this Contract, it will comply with all federal laws and regulations related to grants of federal funds under this Contract. As part of this agreement, Performing Agency will make the necessary certifications and agreements required, including but not limited to federal assurances, Attachment D

The undersigned contracting parties do hereby certify that, (1) the services specified above are necessary and essential for activities that are properly within the statutory functions and programs of the effected agencies of State Government, (2) the proposed arrangements serve the interest of efficient and economical administration of the State Government, and (3) the services, supplies or materials contracted for are not required by Section 21 of Article 16 of the Constitution of Texas to be supplied under contract given to the lowest responsible bidder.

RECEIVING AGENCY

PERFORMING AGENCY

TEXAS PARKS AND WILDLIFE DEPARTMENT

THE UNIVERSITY OF TEXAS AT TYLER

By:

Michele Martinets

By:

C. Arlene Horne

Michele Martinets, CTPM
Contract Specialist

C. Arlene Horne, Ph.D., CRA

Vice President for Research and Federal
Relations

Title

Date:

8/30/10

Date:

30 Aug 10

Attachment A

Title: Surveys for Threatened and Endangered Mussels and Fishes in Rivers of Northeastern Texas

Need.

Northeast Texas has river basins that have independent flow to either the Red River in Louisiana or to the Gulf of Mexico. Because of its water resources, this area has been a prime site for reservoir development and for commercial interests that require large quantities of water. Intensive ranching, poultry operations, timber harvesting, and oil drilling are significant industries in most northeast Texas counties. In addition, because of the dramatic increase in population in the nearby Dallas/Fort Worth area, intense pressure exists to build dams on all the rivers and large tributaries in the region. Populations within northeast Texas alone are expected to increase from 1 million to 1.5 million people increasing the demand for water (TPWD 2005). Alteration of the natural flow regime caused by reservoir construction is one of the most significant threats to riverine ecosystems (Dynesius and Nilsson 1994, Nilsson and Berggren 2000). The 2005-2010 Texas Comprehensive Wildlife Conservation Strategy plan (TPWD 2005) identified "evaluating how instream flows and water quality impact rare and endangered species" as an area of high priority. For both fishes and mussels, disruption of natural habitat has been reported as one of the most significant threats to their survival (Williams et al. 1993, Warren et al. 2000).

Studies have shown that changes in water flow occurring downstream of dams have major impacts on mussel diversity and abundance (Vaughn and Taylor, 1999). Mussels of the family Unionidae are considered one of the most imperiled groups of animals in North America (Richter et al. 1997), with estimates of the number of species that are considered imperiled as high as 40% (Neves et al. 1997; Vaughn, 1997). Texas contains at least 52 of the more than 300 unionid mussel species found in North America (Howells et al., 1996) with species composition in eastern Texas differing significantly from that of central and western areas (Neck, 1982). Riverine mussels are relatively sedentary, slow-growing and long-lived (> 25 years) and the larva of most species must parasitize specific host fish species (Watters 1994, Vaughn and Taylor 2000), all traits that make them susceptible to anthropogenic changes. In addition to reservoir construction, freshwater mussels of eastern Texas are impacted by erosion from agricultural land, water pollution and commercial harvesting (Neck, 1986).

Similar to freshwater mussel species, the southern United States has the richest diversity and highest number of endemic fish species in North America, with 41% of these native fishes considered endangered, threatened, or vulnerable (Warren et al. 2000). Habitat alteration including channelization, impoundments, sedimentation, and other flow modifications are the primary reasons behind these declines (Warren et al. 2000). East Texas is a center for fish diversity in the state. For example, two of its largest rivers, the Neches and Sabine Rivers, have 93 and 108 species, respectively, out of the approximately 161 species known in the state (Thomas et al. 2007).

More complete surveys for rare species of fish and mussels are needed throughout the extent of the rivers in the northeast Texas region. The historical survey data on the mussels and fishes in the region is limited in scope and much of it is dated. Four of the twelve unionid species to soon be listed as Endangered by the U. S. Fish and Wildlife Service have been recorded within northeast Texas, as well as four state Threatened species of fish and six fish Species of Concern (TPWD 2005). Recent TPWD surveys of unionid mussels at 49 sites in east Texas (Karatayev and Burlakova, 2007), included reservoirs, bridge crossings on 4 rivers and some stream segments, but were relatively unsuccessful at recording the four endangered species. Surveys conducted at reservoirs and surveys at bridge crossings of rivers are **not** the optimal sites for the four unionids. Reservoirs tend to support thin shelled lentic species that can tolerate silting and our work on both the Sabine and Neches Rivers found Texas heelsplitters, Louisiana pigtoes and southern hickorynuts in sites quite distant from bridge crossings (Ford, et al, in review; Williams et al., 2009). The rivers of east Texas have been sampled for fish diversity (e.g., Hubbs 1957, Capone and Kushlan 1991, Anderson et al. 1995, Burgess 2003, Hocinghaus et al. 2007), however, these did not record the

threatened species. Some state agencies have also sampled in rivers proposed for this study as part of monitoring efforts (e.g., TCEQ, TPWD). To our knowledge, no surveys have been undertaken to specifically document the distribution of the rare fish species.

The proposed study will specifically fill in records for areas where freshwater mussels and fishes have not been recently surveyed with emphasis given to those sites where habitat characteristics are appropriate for the endangered or threatened species listed in the Texas Wildlife Action Plan (see Appendix for targeted species).

Objective. The overall objective is to obtain a database of information on the occurrence of rare species of mussels and fish throughout the extent of the rivers of the northeast Texas region.

Expected Results or Benefits:

The overall objective is to obtain a database of information on the rare species of mussels and fish in the northeast Texas region. The mussel species are the Triangle pigtoe, *Fusconaia lananensis*; and Louisiana pigtoe, *Pleurobema riddellii*; the Texas heelsplitter, *Potamilus amphichaenus*; and the Southern Hickorynut, *Obovaria jacksoniana*. Fish species that are Threatened or Species of Concern include the paddlefish, *Polyodon spathula*; American eel, *Anguilla rostrata*; bluehead shiner, *Pteronotropis hubbsi*; blackspot shiner, *Notropis atrocaudalis*; ironcolor shiner, *N. chalybaeus*; Sabine shiner, *N. sabinae*; silverband shiner, *N. shumardi*; blue sucker, *Cycleptus elongates*; creek chubsucker, *Erimyson oblongus*, and the Western sand darter, *Ammocrypta clara*. The project will involve surveying on rivers and large tributaries in four specific river basins that have different logistical problems and also somewhat different preliminary databases. Some have relatively good mussel data but not fish and others have fish information but no mussel data. However, none of the river basins have good information on endangered and threatened species particularly as their occurrence relates to the total extent of the rivers. By determining some of the landscape level geomorphic characteristics of the rivers associated with the particular species, we will be able to sample in locations that would be likely to have the species of concern. This should allow us to be more successful in finding these species than have previous researchers. By also limiting where we sample we will be able to survey a greater extent of each basin. We will then have a much more complete understanding of where each of the threatened and endangered fish and mussels occur in each basin.

Having four rivers within the same geographic area (impacted by the same rainfall, temperature and other stochastic factors) but having somewhat different impacts from humans (channelization, pollution, impoundments) will allow us to also examine whether specific anthropogenic impacts are likely factors in the declines of particular species. After surveys are accomplished we will also be able to identify habitat characteristics for the rare species for use in choosing future survey sites. This information will produce knowledge useful in planning management strategies to improve conditions for these rare species. This information should also be important in developing recovery plans for these threatened fish and mussel species.

Approach.

Task 1. Oct -Dec 2010. *Historical information will be compiled and examined for the occurrence of each species of threatened and endangered fish and mussel in each River Basin. Habitat preferences and other pertinent traits for each species will be determined.*

We will compile available literature on the habitat characteristics of each target fish and mussel species. We will also use habitat and geomorphic data associated with species from our database on the Neches (Williams et al. 2009). Separately for each species, we will select traits in the rivers that best predict that species' presence.

Task 2. Jan – Mar 2011. *Use GIS maps to find potential areas within the river that contain appropriate*

geomorphology and habitat conditions for the occurrence of each threatened or endangered species. Data used will include river width, sinuosity, geology, substrates, vegetation, historical hydrologic data from USGS gauges, etc.

Our data for each species will be used with GIS layers to predict which conditions in stream systems (e.g. river width, geology, substrate, sinuosity, etc.) are important for a species. The results will be used to create a map for each river identifying the potential conditions where rare species should be found.

Task 3. May – Nov. 2011 & 2012. *Surveys will be conducted within each River Basin for the rare fish and mussel species in areas that we predicted from the historical data and our previous collection information.*

Each river will be surveyed from May to November (2011 and 2012) from the upstream areas east of Dallas to downstream areas in northeast and eastern Texas (attachment 2). We will explore the river by kayak for reconnaissance of areas with shells and in appropriate sites we will sample using several methods; a timed hand search, a survey with snorkel gear or hooka and with a mussel rake in deeper areas (Vaughn, et al., 1997). Surveys will be standardized on a per person-hour of searching (Strayer and Smith, 2003). Multiple samples representing approximately 400m of the river at that site will be made. All live unionids will be collected, identified and counted then returned to the river. Detailed habitat data will be collected in association with the capture of any endangered species. These data will include geomorphic features like sinuosity, cross sectional profile, substrate size distribution, and proportion of riffles, pools, and runs. Additional variables will include wetted width, depth, and current velocity along with measures of percent large wood, detritus, canopy cover, and instream vegetation. Water quality measures will include temperature, conductivity, pH, dissolved oxygen (DO), and turbidity. One voucher of each nonendangered species will be retained in the University of Texas at Tyler collection and any questionable specimens will be collected and sent to Robert Howells (Biostudies, Inc.) for identification.

Fish will be collected at each predicted site for rare species using electrofishing (Smith Root SR6 tote barge with generator) and seines. Fish will be identified in the field and released at the site of capture. Sampling will be divided by mesohabitats, with separate effort in riffles, pools, and runs. The specific location of any captured fish Species of Concern (TPWD 2005) will be noted with a GPS for mapping purposes. More detailed microhabitat data will be collected with the capture of any Species of Concern. At each site, we will visually identify the proportion of riffles, pools, and runs (Williams et al. 2004) and set up lateral transects in each. Along transects we will measure wetted width, depth, and current velocity along with measures of percent large wood, detritus, canopy cover, and instream vegetation (Williams et al. 2007). At each site, we also will take water quality measures: temperature, conductivity, pH, dissolved oxygen (DO), and turbidity. Representative vouchers will be maintained for the project period by UT-Tyler in the Department of Biology. Fish vouchers will be examined for glochidia (larval stage of Unionid mussels).

Task 4. Dec. – May 2011 and 2012. *The presence of threatened and endangered species will be placed into ArcGIS.*

The river at each site will be mapped using ArcGIS with mesohabitats (e.g. riffle, run, pool) indicated and the presence of mussel beds and fish species of concern obtained from GPS delineated within the sites. A georeferenced database will be compiled using historical data and data collected by our study in ArcGIS and made available to TPWD following the completion of this study.

The final **Outcome** for this project will be a better understanding of the distribution of target species of fish and mussels, and ideally a better understanding of the factors causing their endangerment. The final **Output** for this project would be a georeferenced database in ArcGIS containing historical and current distributions of rare fish and mussel species in the Neches, Sulphur, Cypress, and Sabine River systems that can be used in recovery models for the target species in these river systems. These maps will also be useful in predicting whether or not rare species would be impacted by a potential project (e.g., road, reservoir, etc.) within the river basin.

Dr. Ford and Dr. Williams have collecting permits from Texas Parks and Wildlife Department for mussels and fishes and an approved institutional IACUC protocol to cover field collection of fish species.

Location.**North Eastern Texas**

County, municipality, township: Delta, Fannin, Lamar, Red River, Bowie, Cass, Morris, Titus, Camp, Upshur, Franklin, Hopkins, Delta, Rains, Wood, Van Zandt, Smith, Henderson, Cherokee, Anderson, Houston, Trinity, Polk, Tyler, Angelina, Nacogdoches, Panola, Harrison, Gregg

State: Texas

Country: USA

Sites will be chosen within reaches of the Upper South Sulphur River west of Cooper Lake Reservoir and another section on the North Sulphur River and South Sulphur west of Wright Patman Reservoir. Big Cypress Creek below Lake Bob Sandlin and below Lake o' the Pine west of Caddo will be surveyed as will Little Cypress Bayou. On the Neches River a 100 km reach from south of state Highway 294 and north of Lake Livingston will be surveyed. Sites on the Angelina River north of Sam Rayburn Reservoir and the Sabine River southeast from Lake Tawakoni to Toledo Bend will be surveyed. The areas of East Texas where the rivers are to be surveyed are shown on the map in the attachments.

Project Personnel.**Project Leader**

Dr. Neil B. Ford
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Coordinating Organization:

The University of Texas at Tyler
Arlene Horne, Ph.D., CRA, Vice President for Research and Federal Relations

Office of Sponsored Research
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Tyler, TX 75799-0001
Phone: (903) 566-7132
Fax: (903) 565-5858

Dr. Neil Ford, Professor of Biology, will serve as Principal Investigator for the project. His research expertise is in life-history evolution. He has supervised 12 M.S. theses, and currently has 1 graduate students. Over the past 29 years he has been PI or co-PI on over 1/2 million dollars in extramural grants. Many of these projects have addressed conservation issues in east Texas, including two on unionid mussels. Dr. Ford has been doing surveys with mussels for the last 10 years in east Texas and has all of the necessary equipment to conduct field surveys on unionids.

Dr. Lance Williams, Associate Professor of Biology, will serve as co-Principal Investigator for the project. His research expertise is in aquatic ecology. He has supervised 8 M.S. theses and 2 Ph.D. dissertations, and currently has 2 graduate students. Over the past 10 years he has been PI or co-PI on over \$5 million in extramural grants. Most of these projects have addressed applied questions related to the management of flowing water ecosystems. Dr. Williams has a fully equipped field laboratory at UT Tyler and all of the necessary equipment, including boats, to conduct the field surveys.

Marsha Williams is a Research Associate at UT Tyler. Her area of research is aquatic ecology, with expertise in fluvial geomorphology and GIS applications. She will supervise the GIS components of the project. Prior to working at UT Tyler, she worked for the Mississippi Extension Service and as a researcher for Ohio State University.

Estimated Cost.

Description	Federal	Match	Total
Year 1 (2010-11)			
a. Personnel:			
P. I. summer salary	7085		7085
Fringe benefits (26.2%)	1856		1856
Co-P.I. summer salary	4522		4522
Fringe benefits (27%)	1221		1221
Co-P.I. salary			
Fringe benefits (25%)			
3 hour P. I load reduction (fall)		20442	20442
2 graduate students	7000		7000
Fringe benefits (8%)	560		560
1 undergraduate assistants	3000		3000
Fringe benefits (8%)	240		240
b. Travel:			
4 trips to each river	4450		4450
In state professional meeting			
c. Supplies			
Diving gear, notebooks, PCR supplies	1365		1365
Boat and trailer repair			
d. Indirect costs (15%)	4695		4695
e. Unrecovered Indirects from Direct Costs (27%)		8451	8451
Indirect Costs (From match: 56% of salaries)			
f. Total (year 1)	35,994		64887
Year 2 (2011-12)			
a. Personnel:			
P. I. summer salary (2/9 of 9 month salary)	7085		7085
Fringe benefits (26.2%)	1856		1856
Co-P.I. summer salary (1/9 of 9 month salary)	4522		4522
Fringe benefits (27%)	1221		1221
Co-P.I. salary (1/9 of 9 month salary)	1500		1500
Fringe benefits (8%)	120		120
3 hour P. I load reduction (fall)		20442	20442

2 graduate students	7000		7000
Fringe benefits (8%)	560		560
2 undergraduate assistants	3000		3000
Fringe benefits (8%)	240		240
b. Travel:			
4 trips to each river	4450		4450
In state professional meeting	1000		1000
c. Supplies			
Diving gear, notebooks, PCR supplies	1364		1364
d. Indirect costs (15%)	5088		5088
e. Unrecovered Indirects from Direct Costs (27%)		9158	9158
Indirect Costs (From match: 56% of salaries)			
f. Total (year 2)	39006		68606
Total Costs	75,000	58,493	133,493
Percentages	56	44	100

Budget information.

P. I. (Dr. Neil B. Ford, Professor of Biology) salary is 1/3 salary for June through August each summer. The University of Texas at Tyler has granted a 3 hour reassigned time to the project for each fall and spring (25% of his salary) which will be used for data management, analysis and writing equivalent to 10 hours/week. Indirect costs at the University of Texas at Tyler is set at 56% of salaries, wages and fringe benefits but as this exceeds the 15% total allowed by this agency it was calculated at the maximum allowable. Assistants are needed during June through August each summer. Graduate student salaries are calculated at the same monthly rate for teaching assistantship for the department (approx. 19 hours/week for 14 weeks at \$13.27 per hour = \$3600). Undergraduate student salaries are calculated at \$7.35 for approx. 12 hours a week for 17 weeks for \$1500. The graduate students will be recruited nationally to start our master program in Biology but the undergraduate students will be hired from our current students. Travel estimates are based on an expected 4 required trips to each river with no lodging but per diem at \$36 per day and mileage at \$0.65 per mile. Trip lengths will vary based on the productivity of each survey. Supplies requested are to run genetic analysis on tissues (most during year 1) and other consumable supplies. Publication costs are requested in year 2. The kayaks and boat are owned by the university but the boat and a second trailer will need servicing to function. Funds may be moved between categories if it becomes necessary within the limits allowed by the granting agency and within the total amounts for each year.

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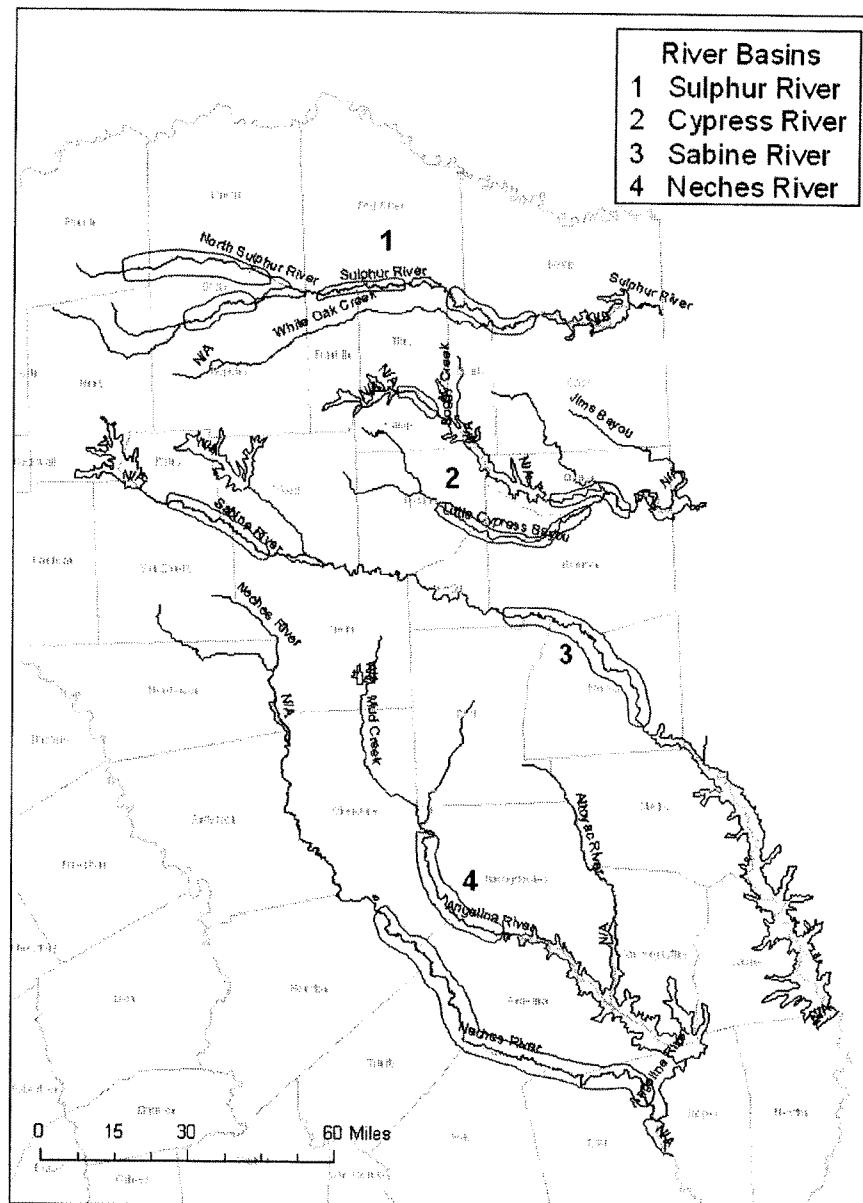
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STUDY AREA
NE Rivers

Northeastern Texas River Basins to be studied:

Map of rivers where the surveys will be conducted. Sites will be chosen within the delineated area of the map based on traits of the species.



Background on the rivers:

The Sulphur River

The Sulphur River Basin starts with the South, Middle and North Sulphur rivers and flows 121 km across rangeland and prairies through the most northeastern part of Texas into Arkansas where it joins the Red River. Several reaches are considered "Significant Stream Segments" based on mitigation of wetlands destroyed to build Lake Wright Patman. Marvin Nichols II and George Parkhouse I and II are reservoirs proposed for the watershed, which would result in White Oak Creek WMA being lost as well as much of the remaining habitat for riverine mussels. Monitoring species being considered for protection was listed as a high priority for the basin (TPWD 2005).

The rivers of the basin have had few recent surveys for mussels, although the few examined have had significant numbers (M. May, pers. obs.). The basin contained two of the original no-harvest mussel sanctuaries established by TPWD in 1993, but these were deleted from the list in 2007. No data on mussel numbers from those areas were collected either before or during the listing of the sanctuaries. The upper South Sulphur west of Cooper Lake, the North Sulphur and Sulphur South Sulphur together are very extensive and may have important populations of these rare species. If dams are to be built on these rivers finding out that information is critical.

Because of the history of channelization in the river, the Sulphur has been surveyed several times resulting in published papers (Carroll et al. 1977, Burgess 2003). To our knowledge, no specimens of the Threatened fish species have been reported. We will evaluate data from state agencies to verify their absence from historical collections.

The Cypress River

Cypress Creek starts in Hopkins County and flows southeast through heavily wooded areas to Caddo Lake on the Louisiana state line. Intensive poultry operations have heavily impacted the upper watersheds. Mercury and depressed dissolved oxygen occur in Big Cypress creek and Harrison Bayou. The state-threatened Bluehead shiner schools in the backwaters of Black Cypress Bayou and Little Cypress creek near Caddo Lake and have been impacted by low flow. Low instream flows, oil drilling and the run-off from chicken farming have likely impacted mussels and fishes. Monitoring the impact of instream flow is a priority in this basin (TPWD 2005).

Fish inventories have been conducted on the Big Cypress Creek below Lake Bob Sandlin and below Lake o' the Pines to examine the impact of instream flows to Caddo Lake (Caddo Lake Institute). To our knowledge, those data have not been published. Some mussel surveys have been conducted at Lake Bob Sandlin (Bulakova, pers. comm.) but not on the larger streams. One mussel sanctuary east of Bob Sandlin has not been surveyed. Because mussels are very susceptible to nitrogen levels, their populations have likely been impacted in the Cypress.

The Sabine River

The Sabine River Basin begins east of Dallas with Lake Tawakoni is located at its headwaters. It flows east to Louisiana to the large reservoir, Toledo Bend, and then goes south to Sabine Lake on the Gulf. The reservoirs on the river are receiving increased demands from DFW metroplex for water causing a decrease in flow, and several new reservoirs have been planned for the river. At least one, on Prairie Creek, is likely to be built and others may be in planning. In the Texas Action Plan the decline in mussels is mentioned in the section on this basin (TPWD 2005).

The upper Sabine has recently been surveyed for mussels. Ford and Nicholson (2006) surveyed the river above the Old Sabine Bottom Wildlife Management Area and Ford et al., (in press) surveyed the three mussel sanctuaries on the river. However, the fish on the river have not been examined in a number of years and few published studies exist (Anderson et al. 1995). This survey would extend the known mussel samples between the three mussel sanctuaries and down to Toledo Bend. It would also sample the area for the Threatened fish and Species of Concern.

The Neches River

The Neches River along with its tributary the Angelina River flows south through the northeastern Texas piney woods and hardwood bottoms. The rivers lead into the Big Thicket, contributing to its rich diversity. Lake Columbia on Mud Creek will remove some flow in the Neches when it is built in the near future. Plans to build a large reservoir on the Neches itself seem to be on hold at the moment. High priorities for this basin are to monitor

Species of Concern and groups suspected to be in decline, or for which little are known (TPWD 2005). Studies to determine adequate instream flow and water quality are also of high priority.

We sampled the upper Neches from Lake Palestine to State Highway 294 for both mussels and fish (Williams et al. 2009). Two of the Endangered mussels and two Threatened fish species were found in the samples. Sites further downstream need to be sampled as do some on the Angelina River above Lake Sam Rayburn. Mussel surveys on the Angelina River have been conducted only at bridge crossings, but good mussel populations and some rare species were found (Burlakova and Karatayev 2008). Surveys throughout the river are needed to determine the full extent of the available habitat for the rare species.



Attachment B

LANDOWNER PERMISSION FOR WILDLIFE RESEARCH

(Pursuant to Section 12.103 of the Texas Parks and Wildlife Code)

1. **Use of Information:** I hereby grant approval for Texas Parks and Wildlife Department employees to enter property I own or manage to conduct scientific investigations and research on wildlife and to record and use (such as in analyses) site-specific information from the property. This may include placing that information onto a topographic map and entering the information into a Department database. Thus, the information could be viewed by the public.

(Landowner or authorized agent)

(Date)

2. **Reporting of Information:** I hereby grant approval for Texas Parks and Wildlife Department employees to report (such as in publications or technical reports) the above approved information in a manner that permits identification of the location of the specific parcel of property I own or manage.

(Landowner or authorized agent)

(Date)

3. **Other Conditions:** List any other conditions that apply to this approval.

4. **Name and Address:**

(Name of Landowner or Authorized Agent)

(Address)

(City, State, Zip)

5. **Optional:**

(Name of Ranch or Tract)

(County)

(Acreage)

(Home Phone)

(Office Phone)

(FAX)

Texas Parks and Wildlife Department maintains the information collected through this form. With few exceptions, you are entitled to be informed about the information we collect. Under Sections 552.021 and 553.023 of the Texas Government Code, you are also entitled to receive and review the information. Under Section 559.004, you are also entitled to have this information corrected. For assistance call 512-389-4978.

Sample Invoice with Match (on vendor letterhead)**ADDRESS:**Send to the address of the contactInvoice Date:MM/DD/YYperson on the contract.Invoice #:#####Payment amount for Performance Period:**\$5,865.00**

(Total Costs in Column B, Expenditure Categories)

RE: Contract # _____

Performance Period:**MM/DD/YY through MM/DD/YY**

(same as Performance Period in Column B)

	(A)	(B)	(C)	(D)
		Performance Period for MM/DD/YY through MM/DD/YY		
Expenditure Categories	Contract Budget		Cumulative Expenses	Balance of Budget as of MM/DD/YY
Salaries	\$10,000.00	\$2,000.00	\$2,000.00	\$8,000.00
Fringe Benefits (25%) *	\$2,500.00	\$500.00	\$500.00	\$2,000.00
Professional and Contracted Services	\$5,000.00	\$2,000.00	\$2,000.00	\$3,000.00
Travel	\$1,000.00	\$200.00	\$200.00	\$800.00
Supplies	\$2,500.00	\$400.00	\$400.00	\$2,100.00
Equipment	\$5,000.00	\$0.00	\$0.00	\$5,000.00
Total Direct Costs	\$26,000.00	\$5,100.00	\$5,100.00	\$20,900.00
Indirect (if allowable) 15% *	\$3,900.00	\$765.00	\$765.00	\$3,135.00
Total Costs	\$29,900.00	<u>\$5,865.00</u>	\$5,865.00	\$24,035.00

Match Expenditures

Salaries	\$10,000.00	\$2,000.00	\$2,000.00	\$8,000.00
Fringe Benefits	\$2,500.00	\$500.00	\$500.00	\$2,000.00
Professional and Contracted Services	\$5,000.00	\$2,000.00	\$2,000.00	\$3,000.00
Travel	\$1,000.00	\$200.00	\$200.00	\$800.00
Supplies	\$2,500.00	\$400.00	\$400.00	\$2,100.00
Equipment	\$5,000.00	\$0.00	\$0.00	\$5,000.00
Total Direct Costs	\$26,000.00	\$5,100.00	\$5,100.00	\$20,900.00
Indirect (if allowable)	\$3,900.00	\$765.00	\$765.00	\$3,135.00
Total Costs	\$29,900.00	\$5,865.00	\$5,865.00	\$24,035.00

* Fringe Rates & Indirect Rates must be approved in the grant application process with TPWD.

I, subrecipient/vendor, certify that this invoice is correct and that matching funds (if required in the contract) have been provided and will be subject to audit under OMB Circular A-133. I further certify that this invoice has not been previously paid.

U.S. Department of the Interior

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - **The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used or use this form certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)**

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters- Primary Covered Transactions

CHECK ☐ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK ☐ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK ☒ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

The University of Texas at Tyler
3900 University Boulevard, Tyler, Smith, Texas, 75799-0001

Check ___ if there are workplaces on files that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK ___ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK ☐ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK ☐ IF CERTIFICATION FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.



SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

C. Arlene Horne, Ph.D., CRA, Vice President for Research and Federal Relations

TYPED NAME AND TITLE

08/30/10

DATE

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

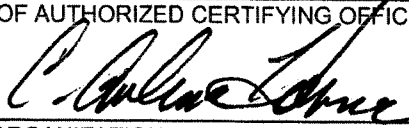
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 		TITLE Vice President for Research and Federal Relations
APPLICANT ORGANIZATION The University of Texas at Tyler		DATE SUBMITTED 08/30/2010