

Engineer DITL Video CC Text

Text to Display	Timecode
[Narrator] Welcome to NRCS.	End: 00:00:04:00 Begin: 00:00:02:00
We protect, conserve, and restore America's natural resources.	End: 00:00:10:00 Begin: 00:00:06:00
We help people help the land.	End: 00:00:18:00 Begin: 00:00:16:00
There are many people who work together on a conservation team.	End: 00:00:25:00 Begin: 00:00:22:00
Take some time to discover a day in the life of an NRCS Engineer.	End: 00:00:29:00 Begin: 00:00:26:00
[NRCS Engineer] Hi! My name is Andrea and I'm an NRCS engineer.	End: 00:00:36:00 Begin: 00:00:33:00
I'm glad you can join me to see what a day in the life of an NRCS engineer can be like,	End: 00:00:40:00 Begin: 00:00:37:00
but one thing to remember is that no two days are really ever the same.	End: 00:00:44:00 Begin: 00:00:41:00
Our days are as varied as the resources we work to conserve.	End: 00:00:47:00 Begin: 00:00:45:00
A typical day might include site evaluations, design work, surveys, or construction inspection.	End: 00:00:53:00 Begin: 00:00:48:00
But today we'll be going out to survey an agricultural waste facility.	End: 00:00:57:00 Begin: 00:00:54:00
And before that, I'll be working on a fish passage design.	End: 00:01:00:00 Begin: 00:00:58:00
[NRCS Engineer] As I mentioned, today I'm working on a fish passage design.	End: 00:01:05:00 Begin: 00:01:02:00

Text to Display	Timecode
I've already surveyed and collected all the data I need for this design	End: 00:01:08:00 Begin: 00:01:06:00
and have downloaded it here at my computer using my engineering design software.	End: 00:01:13:00 Begin: 00:01:09:00
This software allows me to create three-dimensional models as well as create my eventual construction drawings.	End: 00:01:19:00 Begin: 00:01:14:00
[NRCS Engineer] This design also requires the use of hydraulic computer modeling software.	End: 00:01:26:00 Begin: 00:01:22:00
Today I'll be using HEC-RAS, but there are other models as well.	End: 00:01:30:00 Begin: 00:01:27:00
This model allows me to calculate velocities and flow capacities of the proposed alternatives.	End: 00:01:35:00 Begin: 00:01:31:00
[NRCS Engineer] Many days are spent designing solutions to complex resource concerns utilizing our engineering skills and innovative thinking,	End: 00:01:44:00 Begin: 00:01:37:00
as well as drawing on the vast technical knowledge available to us in specialized engineering staff.	End: 00:01:50:00 Begin: 00:01:45:00
Our designs are a culmination of many objectives and goals.	End: 00:01:55:00 Begin: 00:01:51:00
As the engineer, we must know and understand our resource concerns, our physical parameters, and our project goals.	End: 00:02:03:00 Begin: 00:01:56:00
This allows us to design solutions that are technically sound while meeting all applicable standards and specifications	End: 00:02:10:00 Begin: 00:02:04:00
as well as meeting the goals and objectives of our landowners and conservation partners.	End: 00:02:15:00 Begin: 00:02:11:00
[NRCS Engineer] Hi, Greg! [NRCS Soil Conservationist] Hi, Andrea! [NRCS Engineer] Hi, Matt! [Landowner] Hi, Andrea!	End: 00:02:18:00 Begin: 00:02:16:00
[NRCS Soil Conservationist] Well, we're here today to conduct a survey for your waste storage facility.	End: 00:02:22:00 Begin: 00:02:19:00
[Landowner] Great! Spraying manure on my fields daily has been difficult during certain times of the year.	End: 00:02:26:00 Begin: 00:02:23:00

Text to Display	Timecode
I'll be very happy when the storage facility is installed.	End: 00:02:28:00 Begin: 00:02:27:00
[NRCS Soil Conservationist] I'm glad we're able to help you with your resource concerns.	End: 00:02:31:00 Begin: 00:02:29:00
[NRCS Engineer] Now, the last time I was here to conduct your inventory and evaluation of this site, we discussed your animal numbers and location.	End: 00:02:38:00 Begin: 00:02:32:00
I used that information to determine how much storage you would need and, therefore, how big your storage facility would need to be.	End: 00:02:44:00 Begin: 00:02:39:00
Once we survey your site, I can determine what dimensions would work best here while providing you with the required storage volume.	End: 00:02:51:00 Begin: 00:02:45:00
[Landowner] Great! We'll be able to locate the facility where we previously discussed?	End: 00:02:54:00 Begin: 00:02:52:00
[NRCS Engineer] Yes, we can.	End: 00:02:56:00 Begin: 00:02:55:00
During that same visit, John, our Soil Scientist, had conducted a soils investigation to make sure that the location was suitable for an in-ground storage facility as you desired.	End: 00:03:05:00 Begin: 00:02:57:00
I reviewed those investigation results, and everything looks good for locating the pit where we had discussed last time.	End: 00:03:11:00 Begin: 00:03:06:00
Those investigation holes showed no evidence of a higher perched water table, so the pit can go right where we discussed.	End: 00:03:16:00 Begin: 00:03:12:00
[NRCS Soil Conservationist] We'll let you know when we've finished up.	End: 00:03:19:00 Begin: 00:03:17:00
[Landowner] Alright. I've got to leave for a little bit. Give me a call if you need anything. [NRCS Soil Conservationist] OK. Thanks.	End: 00:03:22:00 Begin: 00:03:20:00
[NRCS Engineer] Well, let's get started with the survey.	End: 00:03:25:00 Begin: 00:03:23:00
Do you want to start with some shots at the barn corners and then we'll move our way around the existing pit?	End: 00:03:30:00 Begin: 00:03:26:00
[NRCS Soil Conservationist] Sounds good. [NRCS Engineer] Great!	End: 00:03:32:00 Begin: 00:03:31:00

Text to Display	Timecode
[NRCS Engineer] With the total station and data collector, I'm collecting horizontal position and vertical elevation	End: 00:03:39:00 Begin: 00:03:33:00
to record the topography of this site as well as capture existing features such as the barn corners and pit.	End: 00:03:45:00 Begin: 00:03:40:00
[NRCS Engineer] I think one more corner shot will get it for us, Greg.	End: 00:03:57:00 Begin: 00:03:53:00
[NRCS Engineer] An on-site, preconstruction meeting is held before any construction begins.	End: 00:04:06:00 Begin: 00:04:01:00
At this meeting, I review my designs with the landowner and contractor and answer any questions that they may have.	End: 00:04:14:00 Begin: 00:04:07:00
I also review the construction specifications and inform them of items in need of inspection by NRCS staff during the construction process.	End: 00:04:23:00 Begin: 00:04:15:00
Clear communication between NRCS, the landowner, and the contractor is critical during the preconstruction meeting	End: 00:04:31:00 Begin: 00:04:24:00
and throughout the construction process to ensure that the project is installed to meet all standards and specifications.	End: 00:04:38:00 Begin: 00:04:32:00
[NRCS Engineer] I hope you enjoyed seeing what a day of an NRCS Engineer can be like.	End: 00:04:43:00 Begin: 00:04:39:00
Every day, including those spent at the computer or in the field, play a part in the big picture of resource conservation.	End: 00:04:50:00 Begin: 00:04:44:00
However, the real satisfaction comes from seeing my designs installed and functioning to conserve our natural resources.	End: 00:04:57:00 Begin: 00:04:51:00
The health of our soil, water, air, plants, animals, and people all depend on good stewardship.	End: 00:05:04:00 Begin: 00:04:58:00
I'm proud to be a part of the Natural Resources Conservation Service, helping people help the land,	End: 00:05:11:00 Begin: 00:05:05:00
and transforming ideas into real-life changes that conserve the natural resources upon which we all depend.	End: 00:05:17:00 Begin: 00:05:12:00
[NRCS Engineer] My name is Andrea Palladino, and I'm a Civil Engineer with the Natural Resources Conservation Service.	End: 00:05:24:00 Begin: 00:05:19:00

Text to Display	Timecode
The thing I like most about my job is knowing that the work that I do helps to preserve and conserve the quality of our fresh water.	End: 00:05:32:00 Begin: 00:05:25:00
[Narrator] For more information, please visit our Web site at nrca.usda.gov .	End: 00:05:40:00 Begin: 00:05:35:00
NRCS is an equal opportunity provider and employer.	End: 00:05:46:00 Begin: 00:05:42:00