El Agua es Vida Acequias in New Mexico Loan Kit Teacher's Guide

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Embudo, NM 2008



Lopez family farm, Santa Cruz, NM 2013

**El Agua es Vida: Water is Life** is a true sentiment everywhere but especially here in New Mexico. Our connection to water and land goes back thousands of years with the first inhabitants of the area. Traditional practices of sustainable water use have been passed down for generations.

The practice of using acequias to manage water is a somewhat new custom. Brought to New Mexico at the end of the 16th century with the Spanish, acequias have been a part of our farming communities since.

This kit will allow students to explore the acequia tradition through thematic units. Through modeling, role play, creative writing and more, the experience of managing and using water for agriculture will come alive.

Developed for students in grades 3-8, most of the lessons can be modified for younger or older students. Teachers are encouraged to adapt lessons as necessary to best serve their students.

The kit includes the story *The Mother Ditch* by Oliver LaFarge, which is an historical account of an acequia community. Parts of the story can be read prior to completing the activities, to add depth to the lesson content. The kit includes a flash drive with historical photographs (including a folder of images connected to the story), along with video, music, and other learning resources.

Of course the best way to understand the acequia system is by interaction with an actual acequia. This curriculum recommends some sites with working acequias in central New Mexico that classes can visit.

Whether studying New Mexico history or science and society, this kit will show how *Water is Life*!

Enjoy!

# INTRODUCTION

Here in New Mexico, the *acequia* tradition has been practiced for hundreds of years. An *acequia* is a hand-dug, gravity fed ditch or canal that diverts and carries water from a natural water source such as a river or stream to irrigate fields, gardens and orchards. The term also describes the community

that manages and uses the water. Acequia is an Arabic word. The practice was developed by North Africans and brought to Spain in the 8th century CE. The practice came to NM and was established at Chamita after the Oñate expedition of 1598. It is the longest, continuous water management practice in the US with laws and customs for use and sharing. Las Leyes de los Indias contained water policy laws for the New World. A similar technology was developed and used by the Pueblo Indians, although the social system for sharing and distributing the water was different.



Acequia at Ohkey Owingeh Pueblo, December 1905

Acequias work because they fit within the natural part of the watershed. A **watershed** is land surface and underground space in which water in the form of precipitation runs off to a common low lying

body of water. Gravity is the motive force for movement of the water through the system, and only surface water can be used in an acequia system. Surface water is a small fraction of all the available usable water on earth, and therefore, this water must be conserved and managed in a very controlled way. Acequia practice and governance works to conserve and allocate water in a sustainable and fair way within the community. The advantages of acequias include promoting non-industrial, essentially fossil fuel free agriculture, recharging the aquifer and providing a green space and wildlife cooridor.



Acequia de Santa Cruz green space, 2012

The lessons in this kit will focus on four main themes: watershed, water regime, waterscape, and challenges and tipping points. By completing these exercises, students will understand the hydro-so-cial system of sustainable water practice and the socio-cultural features of its use here in New Mexico.

Begin with an introduction of what an acequia is and how it is used. Discuss some of the factors that influence water use practices. The following are some questions that may be useful.

Discussion questions:

- 1. Why do people decide to live where they do or move to other places?
- 2. Why is location important?
- 3. How do people interact with the environment and what are some of the consequences of those interactions?
- 4. How can we preserve fundamental values and beliefs in a world that is rapidly becoming one technology-linked village?
- 5. How are individual rights protected and challenged within the context of majority rule?
- 6. What is the most effective allocation of the factors of production (land, labor, capital, and entrepreneurship)?

#### **GRADE LEVEL**

3rd - 8th grade

**ESTIMATED TIME** 

1 class period

**SUBJECTS** 

Earth Science

#### MATERIALS

- $\Box$  Globe or world map
- □ Water cycle/watershed poster (on flashdrive)
- □ "All the Earth's Water" model packets
- □ 3D "All the Earth's Water" model
- □ Acequia photographs (on flash drive)

#### ASSESSMENTS

Whole class discussion

Cooperative group work

#### **EXTENSION**

This activity can also be done with beakers, graduated cylinders and pipettes of water. See flash-drive for lessons.

1000 ml = all the Earth's water

25 ml = fresh water

.3 ml = surface water



Acequia at Taos Mountain, June 2012

# LESSON ONE: LIVING ON A DROP OF WATER

# **SUMMARY**

This lesson will use a model to help students visualize how water changes and moves on our planet and how those actions are connected to acequias. This will demonstrate just how little usable fresh water there is on earth for people and other living things to consume.

# **O**BJECTIVES

Students will estimate the amount of fresh vs. salt water on the earth's surface

Students will represent the amount of fresh water in a model

Students will appreciate the value of surface fresh water for human use

# PROCESS

- 1. Using the globe, begin with a discussion of what makes up the Earth as a planet. Review terms like geosphere, hydrosphere, atmosphere and biosphere and their relationship to each other in your discussion. Focus on the hydrosphere and define salt water and fresh water and identify some bodies of salt water and bodies of fresh water. Point out the oceans and seas, some large lakes and long rivers.
- 2. Use a figure of the water cycle to show how water changes and moves on the planet. Determine where and when water is in a liquid fresh water state. Identify fresh water that is available for human consumption (mainly surface fresh water, although some ground water in aquifers is also often used by humans for consumption). Discuss how a **watershed** fits into this system.
- 3. Next, explain that the class will be focusing on the hydrosphere to determine the amount of fresh water found on earth. Discuss why fresh water is so important (it sustains all life on Earth) and what some of the uses of fresh water are (drinking, cooking, bathing, growing our crops, power generation, transportation, recreation, industrial use, etc).
- 4. Explain that the "All the Earth's Water" model represents all of Earth's water if you could take all the land off the globe and put it in another place. This will represent all the liquid water found in oceans, lakes, rivers and streams and underground, all the frozen water in glaciers and making up the polar ice caps and all the water vapor found in the atmosphere.



Blue Marble: NASA

- 5. Divide the class into 5 groups of about equal size and pass out the model packets to each group. Explain that the group will work together to select a piece for the model that represents the volume of just the fresh water on the earth (2.5%). Hold up some of the fresh water pieces and tell the class to discuss and decide which fresh water piece is the right amount compared to the amount of water on the "All the Earth's Water" page.
- 6. When the group comes to an agreement on the amount of fresh water, they will place the piece on the model. When all groups are finished, reveal the answer to determine how close their guess was. Gather their impressions about the amount of fresh water on the model. Discuss that there is even less fresh water available for use. Much is frozen in glaciers and unavailable underground. It is mainly surface water in lakes, rivers and streams that humans have access to for the many important uses discussed earlier. This fact will set the stage for the next activity where students will explore the difficult task of managing such a small volume of precious surface water (1.2% of fresh water).
- 7. When cleaning up and returning all the model pieces to their envelopes, make sure each envelope has the square of water that represents the correct amount of fresh water.

There is also a 3D model in the kit that groups can try to complete. This model works like a puzzle where the pieces will only fit in the frame if the correct block representing fresh water is selected. You can use this as a demo model or have groups come up and solve the model successively. They must first decide which size light blue piece they think will represent fresh water, place that in the frame, and try to fit in all the dark blue salt water pieces. If they cannot get the pieces to fit, they will need to make another guess on the amount of fresh water represented by the light blue pieces.

8. Finally, conclude by showing how acequias fit into this system and are used in New Mexico for watering crops and growing food. Show the Google Earth image of crops in Northern New Mexico. Review some of the acequia photographs.

#### **GRADE LEVEL**

3rd - 8th grade

**ESTIMATED TIME** 

1 class period

**SUBJECTS** 

Social Studies

Earth Science

#### MATERIALS

- □ Video of a limpia (on enclosed flash drive
- $\Box$  Acequia diagram
- $\Box$  Hat, clothing and boots
- □ Notebook (and sample roster)
- $\Box$  Tools (shovel and rake)
- □ Measuring gauge
- □ Bushel basket

#### ASSESSMENTS

Cooperative role-play

Identification of tools and acequia management processes

#### **EXTENSION**

As an extension exercise, have students write a script for acting out a particular task or water dispute.

# LESSON TWO: BE A MAYORDOMO/A

### **SUMMARY**

Using students' understanding of just how precious a resource water is, this exercise will demonstrate how a strict regime of using the water is practiced here in many hot, dry New Mexico communities. Acequia communities elect a mayordomo/a to manage and enforce water usage in the community. A *mayordomo/a* is a leader in a farming community who decides how surface water is used for irrigation. He or she will organize the yearly cleaning of the acequia, collect the dues required of each user, check to make sure all the parts of the system are working properly and make any necessary repairs, keep track of water allocations and with the input of the acequia commission, settle disputes among water users as well as make decisions about how to use the water when there is too little for irrigation.

As a community organizer, the mayordomo/a will organize yearly *limpias*, gatherings to clean and repair acequias, and measure and record work credits or debits of each of the

workers called *parciantes*. The irrigation season usually starts in mid-March. The mayordomo/a is responsible for gathering each worker and determining how much of the acequia's length each worker will clean. The mayordomo/a will often use a stick called a *vara* to measure and mark off sections of the acequia to clean. He or she will also keep track of the number of hours the parciantes spend cleaning and maintaining the acequia and will allocate water according to the time contributed. (Show video of the limpia in one Northern New Mexico community). Once the ditch is ready to receive water,



El Cerrito mayordomo overseeing parciantes, 1977

the mayordomo/a will check to see that all parts of the system are in working order.

Water is distributed according to the number of documented acres with water rights on the ditch per irrigator. Those who work the ditch get a share of the water. Those who don't must pay for a share of the water. The mayordomo/a will measure water in the main ditch, the *acequia madre*, and allot water to each irrigator accordingly. Distribution by means of *tiempos*, provides a volume of water over time to each field. In times of water scarcity, the mayordomo/a will decide if there is enough water for both agricultural irrigation and for animal consumption.



A compuerta



A young mayordoma and mayordomo



A young parciente



San Isidro retablo: Maxwell Museum

# **OBJECTIVES**

Students will wear costumes and perform the actions of a mayordomo/a and parcientes

Students will describe the important role acequias play in growing our crops

Age appropriate students will determine water priorities and uses in times of scarcity

# PROCESS

- 1. Describe a limpia (ditch cleaning) and the mayordomo/a's role in organizing and facilitating it and the tools he/she uses. Describe the vara and explain its use in marking off *tareas* (sections to work) during a limpia. (There is a great video of this on the enclosed flash drive).
- Using the notebook and ledger, explain how the mayordomo/a keeps track of the number of labor days each parciante works on an acequia. (See Mayordomo Timebook 1922 for more information). Describe how the mayordomo/a keeps track of how the water is allocated (*repartimiento*) and for how long (*tiempo*). Discuss how the mayordomo/a, under the guidance of the ditch commission can make decisions about appropriation, particularly in times of scarcity (*auxilio*).
- 3. Use the diagram to show each part of the acequia system and how they function. Describe the *presa, acequia madre, compuerta, lindero* and *desagüe*. See page 12 for a glossary of terms.
- 4. Next, organize a role play of the above actions using the costumes, notebook, tools and props. Direct a student to demonstrate the duties and responsibilities of a mayor-domo/a while organizing a limpia. Pretend to keep track of the labor contributed by each parciente and record an amount of water to allocate in the mayordomo/a's notebook. Measure the amount of water in the acequia with the measuring gauge. Use the bushel basket to role play crop harvest and sale at a market. Facilitate a discussion among the irrigators to decide how to use the water in a time of scarcity. Lead a discussion of the importance of acequias in farming communities to grow crops.

Enclosed is a San Isidro and angel costume. San Isidro is the patron saint of farmers. Students can act out *The Story of San Isidro* while wearing the costumes. See appendix 1 on page 16 for the script.



Blessing of the water: San Antonio, NM, June 2009

#### GRADE LEVEL

3rd - 8th Grade

#### **ESTIMATED TIME**

1 class period

**SUBJECTS** 

Earth Science

Social Studies

Mathematics

# MATERIALS

All enclosed game materials

- □ Brown corduroy fabric (land)
- $\Box$  Blue cotton sheets (water)
- $\Box$  Plant types and cards
- □ Houses and cards
- Green agricultural fields
- □ Blue satin ribbon (acequia madre)
- □ Blue yarn (acequia water)
- □ Acequia water volume chart

#### ASSESSMENTS

Cooperative urban planning and design

Whole class discussion

#### **EXTENSION**

Bosque Education Guide lessons

# LESSON THREE: LUCK OF THE DRAW GAME

#### **SUMMARY**

Waterscapes, or *paisaje del agua*, are the culturally meaningful places in which humans interact with water and with each other. Waterscape encompasses the natural landscape of mountains, forests, rivers, springs, lakes, hills, arroyos, *llanos* (plains) and desert. Acequias influence the makeup of the landscape, including the man-made features such as *capillas* (chapels), *camposantos* (graveyards), *moradas* (Penitente chapter houses), *calvarios* (hilltop crosses) and *descansos* (roadside shrines). Communities are often planned with processional routes in mind, that take residents from holy places to the water for certain types of rituals and celebrations. In addition, common places, such as plazas are also planned as spaces to gather, celebrate, and buy and sell goods at a market.

# **O**BJECTIVES

Students will demonstrate the connection of people to the land and the arrangement of natural to man-made spaces

Students will complete a model of a watershed and acequia community

Students will play the Luck of the Draw game to model the components of an acequia system and experience the practice of farming

The model is based on the lessons of the Bosque Education Guide. See enclosed lesson plans for instructions on how to use and set up the model in different ways.

# PROCESS

- 1. First, as an entire class, discuss how people decide where to live and how they plan their communities. Some useful questions to answer are: Why do people decide to live where they do or move to other places? Why is location important? How do people interact with the environment and what are some of the consequences of those interactions? Emphasize that the vast majority of the world's population live near a body of water. Define and explain **waterscape**.
- 2. Next, explain that the class will work together to create a waterscape and prepare a model of a river and surrounding communities. Find a large floor space (-10 feet x 15 or 20 feet). Lay the brown fabric down which represents



the land. Shape one end of the fabric to look like mountains.

- 3. Next, take the light blue colored sheets, which will be the river, bunch them up and lay them along the length of the brown fabric, shaping curves and meanders that a river would naturally have.
- 4. Then set up the natural features in and around the river; the forests and grasslands, containing a variety of plant types, the sandbars and other features. Briefly discuss how a natural river system acts, review what a watershed is, and then discuss what types of impacts human settlement along a river would have on the natural system.
- 5. Next add human settlements in chronological order. First place the Pueblos then the modern houses. Discuss what happens to the natural landscape when residential communities are built. Make any changes to the model as a result.
- 6. Then add some agriculture fields along the river and arrange an acequia madre (using the blue ribbon) from the river, around the fields and back to the river.
- 7. Now the model is ready for you to play the game. Divide your class up in groups of 4-5 students each. They will be families or farming partners that will work the land off of each acequia. The object of the game is to grow as much food as possible in a growing season. Groups will decide at the start of the growing season, how many fields they will work, between one and five fields. The challenge is not knowing how much water they will have in any one growing season. If they have enough water to irrigate all their fields in that growing season, they get one point per crop. If they do not have enough water for all their crops, they earn zero points for that growing season. The amount of water in a growing season is determined by the length of a piece of yarn they select for that round. Make sure they understand that the length of yarn represents the volume of water delivered to their crops over a period of time. A long length of yarn may irrigate their crops for the whole season provided they don't have too many crops to water. A short length will either irrigate few crops per season or maybe even no crops per season. You will use the acequia water volume chart to determine how many crops that volume of water will irrigate. Keep track of the points each group earns for each round on the board.

Now, complete these steps for each of the 3 rounds:



Lopez family farm: Santa Cruz, NM, 2013

- 1. Have each group discuss how many fields (from 1-5) they will work for this growing season (round). Their hypothetical discussions can include whether there was a wet or dry winter, determining how much snow pack will melt, run off and be available in the spring for irrigation. What the forecast is for a rainy spring and summer. They can also determine how many of each type of field (gardens, pastures, cropland or orchards) they will plant/work.
- 2. Arrange that number of fields along the river within the acequia madre.
- 3. Have one person from each group pull a piece of yarn from the baggie.
- 4. The student will stretch that length of yarn on the chart to determine how many crops that volume of water will irrigate.
- 5. If they have enough water to irrigate each of their fields, they will earn a point for each field. If they do not have enough water to irrigate each of their fields, they will earn 0 points for the round. Record the point value on the board for each group. Yarn pieces with a knot in them are seasons in which there is a catastrophic flood. They will lose all crops for that season and earn zero points.
- 6. For older students, you can assign a dollar value to the types of crops. Determine how much needs to be invested for each crop and how much profit a successful yield will provide. Groups can determine after three seasons (rounds) whether their investment is profitable.
- 7. As a visual exercise, groups can arrange their yarn to "flow" through their crops. They can wind it from their acequia madre around their fields then back to the river. This will show them how the water flows in the system.
- 8. When all three rounds are completed, determine which groups were successful in their farming and which if any were not. This game only focuses on water as a limiting factor in production. Discuss other factors that can limit production (invasion of pests, poor soil quality, etc.) How is this game and model like the actual practice of farming? How is it different?



Lopez family farm: Santa Cruz, NM, 1986

**GRADE LEVEL** 

3rd - 8th Grade

**ESTIMATED TIME** 

1 class period

Homework assignment

**SUBJECTS** 

Language Arts

Social Studies

#### MATERIALS

- □ Laminated tree
- $\Box$  Brown corduroy fabric
- □ Water droplets and leaves with vocabulary words printed on them (see page 12 for glossary)
- $\Box$  Cloud
- □ Felt river/acequia
- □ Acequia song (on flash-drive)

# ASSESSMENTS

Writing samples

Whole class discussion



# LESSON FOUR: A RIVER OF WORDS

### **SUMMARY**

Hopefully, the lessons up to this point will clarify for the student just how tenuous the acequia system practice is here in New Mexico. Water has always been a limited resource for people and will probably continue to be so. Therefore, it should be apparent why the phrase "Water is Life" or "El Agua es Vida" is paramount in New Mexico. Central to the acequia waterscape is the sentiment of *querencia*, which is both a physical place and the emotional tie to that place. For the final activity, students will express the meaning of water in their lives and their connection to the land through creative writing using vocabulary from this topic.

# **O**BJECTIVES

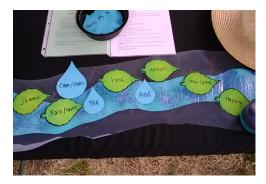
Students will use vocabulary words to express ideas about what acequias mean to them

Students will respond to guided questions and consider actions to take when living with a limited water supply

Students will share their thoughts through creative poetic writing using a limited word bank

# PROCESS

- Set up a display of the tree and cloud on the brown corduroy fabric. You can lay the display on the floor, or drape the fabric over a door or pin it to a bulletin board. Attach the leaves and water droplets to the tree and fabric.
- 2. Explain to the students that poetry and song are an important component to acequia culture. Play the song from the flash drive to demonstrate this.
- 3. Next, explain that students will study the words on the display and choose words among the leaves and water droplets to write about what water means to them. Define any words unknown to the students using the glossary on page 12.
- 4. They can complete their work on paper and some students can volunteer to come up and select words from the word bank to write something to share with others and display on the felt river/acequia.
- 5. Have students write about the importance of water, what water means to them or how they conserve water.
- 6. They can try writing a simple sentence, poem or six-word story about water and acequias.









San Isidro at Las Golondrinas: Santa Fe, NM, 1978

7. In addition to the creative writing piece, older students can write essays for homework that address the following scenarios.

# **Challenges and Tipping Points:**

# What are the Challenges for the Future?

Acequia communities face major economic, social, and environmental challenges, including:

- 1. Loss of farmers/ranchers in each generation because so many young people must leave to make a living.
- 2. Urban development and real estate and water markets create increasing demands to transfer water rights away from agricultural to residential, commercial, and industrial uses.
- 3. Municipal state, and federal policies can support or undermine traditional patterns of land/water rights ownership and use.
- 4. Climate change and prolonged drought impact the availability of water for irrigation and the availability of vegetation for livestock grazing.

# What is a Tipping Point?

Climatologists posit or hypothesize a theoretical point at which change in a climate system accelerates and becomes irreversible.

What are the (hydrological, economic, social) tipping points past which acequias cannot survive?

Can and should these tipping points be averted?

# Where to find more information or working acequias:

- Guiterrez-Hubbel house (south valley Albuquerque)
- Valle del Oro NWR (south valley Albuquerque)
- Casa San Ysidro (Corrales)
- El Rancho de las Golondrinas (Santa Fe)



La Bajada village community acequia, April 2011



The compuerta at La Cienega Creek, Santa Fe County, 2011



A mayordomo oversees a limpia

#### GLOSSARY

Acequia: (n.) a hand-dug, gravity-fed, canal that diverts water from a stream or other natural water source to irrigate fields, orchards and gardens

Acequia madre: (n.) literally "mother ditch" this is the main canal that takes water from the river and divides into each acequia

Agua muerta: (n.) stagnant water

Agua viva: (n.) spring water, flowing water

Alamo algodon: (n.) a cottonwood tree

Arroyo: (n.) an intermittent streambed

**Atarque**: (n.) a temporary dam built across a river to divert water into the acequia madre

**Auxilio**: (n.) an emergency dispensation of water, during times of scarcity, to keep animals alive

Calabasa: (n.) squash, Calabash

Calvario: (n.) a hilltop cross

**Campo-santo**: (n.) a graveyard

Canoa: (n.) flumes that transport water over an arroyo

Capilla: (n.) a chapel

Chute: (n.) a canal that transports water over an arroyo

**Compuerta:** (n.) a headgate that regulates and divides the flow of water

**Corral:** (n.) an animal enclosure

**Derecho del agua**: denotes the "water rights" retained by the parciantes, or members, of an acequia system

**Desagüe**: (n.) a drainage ditch that channels surplus irrigation water back into a stream

**Descanso**: (n.) a roadside shrine

**Headgate**: (n.) made from logs or boards to siphon water, it regulates and divides the flow of water

**Limpiar**: (v.) to clean, spring cleaning of the acequias, limpia: (n.) community cleaning event

**Lindero**: (n.) also known as sangria, a lateral canal that channels water from the acequia madre to individual properties

Llano: (n.) an open plain, grassland



Mayordomo Sam Gallegos, El Rito valley, 2009



San Isidro at Las Golondrinas, Santa Fe, NM, June 2009



Livestock graze in a pasture, Arroyo Hondo, NM 2010

Maiz: (n.) corn

**Mayordomo/a:** (n.) a ditch boss who allocates water and oversees canal maintenance

**Mercedes reales:** (n.) royal land grants that established the land base for colonial settlement and agriculture

Milpa: (n.) a plot of cultivated land used for growing maize

Morada: (n.) a penitente chapter-house

**Paisaje del agua**: New Mexico's acequia waterscape and cultural landscape

**Parciante**: (n.) a ditch member/irrigator, who works the acequias

**Placita**: (n.) a little plaza in a town or village

**Presa**: (n.) an out-take or diversion dam that diverts water from a stream or other natural water source to move it downhill via the main canal

Pueblo: (n.) a small town, generally an Indian town

**Querencia**: a physical place and the feeling or emotion that ties a person—or a people—to that place

Ranchito: (n.) the property holdings of a rancher

**Regar**: (v.) to irrigate

**Repartimiento**: (n.) the partitioning or dividing of waters between ditches that share the same stream or among the parciantes within a single acequia

Rio: (n.) a river

**Sangria**: (n.) also known as lindero, a lateral canal that channels water from the acequia madre to individual properties

**San Isidro**: (n.) the patron saint of farmers invoked for protection of farm fields against weather, pests, and a successful harvest

**Tiempos**: (n.) a rotating period of time in which ditch water is allocated

**Vecino**: (n.) a neighbor, referring to Spanish Colonizers – early New Mexican settlers

**Vara**: (n.) a rod or stick used to divide sections of an acequia for cleaning

**Vega**: (n.) a pasture

# References

Crawford, Stanley. *Mayordomo: Chronicle of an Acequia in Northern New Mexico*. Albuquerque: University of New Mexico Press, 1988.

LaFarge, Oliver. The Mother Ditch. Santa Fe: Sunstone Press, 1983.

# **PHOTOGRAPH CREDITS**

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# NEW MEXICO STATE EDUCATION STANDARDS

See flash drive for detailed list of education standards.

	Social	Social Studies		Science		Langua	Language Arts	Mathematics	matics	Arts
								Proportions		
						Creative	Expository			
	History	Geography	Earth	Life	Society	Writing	Writing	Percentages	Algebra	Drama
grade										
3	•					•				•
4	•		•			•				•
5			•	•	•	•				
9		•	•			•	•	•	•	
7	•	•	•	•		•	•		•	
8		•		•		•	•		•	

# The Story of San Isidro

When Spanish colonizers came to New Mexico at the end of the 16th century, they brought with them many things. They brought their ideas, tools and technologies, animals and plants from the old world, language, religion and many traditions including the adoration of saints. Since the early inhabitants were mostly farmers and ranchers, San Isidro holds a special place among the people, being the patron saint of farmers.

In the Roman Catholic canon, San Isidro was born, raised and farmed near Madrid, Spain. Due to the miracles attibuted to his intercession, he was canonized in 1622. He is the patron saint of Madrid, Spain and his feast day is May 15th.

Because of the isolation of the first Spanish settlers in New Mexico, and the lack of priests in most villages, the colonizers practiced a type of folk Catholism. In this tradition, San Isidro is said to have come from the village of Agua Fria, located just outside of Santa Fe, NM.

The following is a localized story about how Isidro became a saint here in New Mexico. Along with the costumes found in the kit, the script will provide a short presentation of this important figure in New Mexico culture.

# Cast:

Narrator	a good reader with a strong voice
Isidro	a pious farmer from Agua Fria, NM
Isidro's wife	partner to Isidro
Neighbor	another farmer or rancher in Isidro's village
Villagers (3 or more)	Agua Fria community members
Angel	helper to Isidro



# Setting:

On a farm in Agua Fria, NM, near to the village church, in the 17th or early 18th century, Isidro stands in his field with his plow and two oxen as his wife comes along the adjacent road.

Narrator:	Deep in the heart of New Mexico in a small village called Agua Fria just outside of
	Santa Fe lived a pious (that means holy) farmer named Isidro with his wife and fam-
	ily. One year, because he was behind in his plowing, he skipped his church visit on a
	Sunday to work on his field.

#### [enter wife]

Isidro's wife:	Isidro, you must not	plow today and con	ne to church with me.
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**Isidro**: [turning] I must till the soil or else we won't be able to grow our corn and beans.

[exit wife (to church) shaking head and shrugging shoulders]

**Narrator**: Isidro hitched his plow to his oxen and began plowing when a neighbor walked by.

#### [enter neighbor]

**Neighbor**: Isidro, what are you doing? Your corn will grow and die if you plow on a Sunday.

**Isidro**: I must till the soil or else we won't be able to grow our corn and beans.

[exit neighbor (to church) shaking head and shrugging shoulders]

**Narrator**: Isidro continued his plowing when an angel in disguise came by.

[enter angel]

Angel: Good morning, señor.

- **Isidro**: [Looking up but continuing to plow] Good morning.
- **Angel**: Why are you plowing on a Sunday? You should be in church.

**Isidro**: I must till the soil or else we won't be able to grow our corn and beans.

- **Narrator**: Isidro, working hard in the hot sun, removed his hat, wiped his brow and continued to plow despite the stranger's scorn.
- Angel: But señor, if you do not attend church on Sunday, God will send a flood to destroy your crops.
- Isidro: [continuing to work] Flood or no, I must till the soil or else we won't be able to grow our corn and beans.

**Narrator**: Isidro, with very little worry, continued to plow his field.

# Appendix 1

Angel:	God will send a plague of grasshoppers, señor, if you do not stop and go to church.
Isidro:	[continuing to work] There will be nothing to eat unless I till the soil to grow our corn and beans.
Narrator:	Without a care in the world, Isidro continued to plow his field.
Angel:	Well then, if you do not stop plowing and go to church, God will send you a bad neighbor! This neighbor will steal your crops and spread bad gossip about you.
Narrator:	At hearing this, Isidro immediately dropped his plow and ran for the church crying out:
Isidro:	[running towards the church] ¡Dios! Lord have mercy! Not a bad neighbor! I must go to church to pray.
	[angel picks up plow and starts plowing]
Narrator:	Leaving his oxen in his field and ignoring his dirty clothing, Isidro entered the church to pray with his wife. When the villagers left church that day, they saw a strange site in Isidro's field. An angel was plowing his field. God had sent Isidro a helper so Isidro could go to church.
[Isidro, his wif	fe and villagers exit church, angel (no longer in disguise) plows field]
Villager 1:	[surprised] Oh my!
Villager 2:	[pointing at angel] Look at that!
Villager 3:	[excited] It's an angel sent to plow Isidro's field.
Villagers:	[all together rejoicing] It's a miracle!
Narrator:	From that day on, Isidro was an honest and good man who always attended mass on Sunday and was later made into a saint.

[San Isidro wearing his best stands in his field with his plow, oxen and the angel]

Today, in New Mexico, San Isidro is often shown in his field wearing his Sunday best alongside an angel driving his oxen and plowing his field.

- The End -

[curtain call]

# The Bosque Education Guide

visit: http://www.nmnaturalhistory.org/educational-resources/sections/bosque-education-guide for the complete guide