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**LSP ARLINGTON VALLEY, LLC**

*An LS Power Group Company*

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July 31, 2006

Arizona Corporation Commission  
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Arizona Corporation Commission

**DOCKETED**

**AUG 1 - 2006**

DOCKETED BY

Re: LSP Arlington Valley, LLC  
2006 and Management Plan Annual Report  
Docket No: L-00000P-99-0098

As a follow up to the Land Management Annual Report letter delivered on June 29, 2005, please find attached an original and fifteen (13) copies of LSP Arlington Valley, LLC's Annual Report on the Land Management Plan. The report includes the annual report from the University of Arizona on the re-vegetation efforts and a 2006 Ducks Unlimited report on the seasonal wetlands.

This report is being filed in compliance with Condition No. 13 (iv) in ACC Amended Decision No. 62995.

Very truly yours,

Michael Holcomb

LSP Arlington Valley, LLC

File: 400.080.50

cc: Brian K.Bozzo, Compliance Manager

# Duke Energy Arlington Valley Project

## Spring Moist Soil Wetland Monitoring Report



Prepared by:  
Ducks Unlimited, Inc.  
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March 2006



## **Background**

Ducks Unlimited, Inc. (DU) has developed and implemented a design for the establishment of approximately 58 acres of managed wetlands at the Duke Energy Arlington Valley Energy Project site. Of this amount, approximately 18 acres are desert riparian wetlands and approximately 40 acres are moist soil wetlands. The earthmoving component of the wetland project was completed in early spring of 2004. The vegetation establishment component was initiated in May 2005.

As part of the final establishment of the moist soil wetland area for wildlife and wildlife habitat, Duke Energy contracted DU to monitor and report on the development of the wetland vegetation component of the project. Monitoring will occur twice a year with a report submitted to Duke Energy after each site visit. Each report will include documentation of current vegetation and infrastructure condition, recommendations for management over the next several months, and expectations of result from recommended management.

The moist soil wetland project is a managed habitat that relies on people to deliver adequate and timely water. Hence, water and project infrastructure must be carefully managed and maintained for wetland vegetation to grow and thrive. The monitoring program, with subsequent management recommendations, should be undertaken over the next several years to ensure that the wetland project is managed and develops properly into a healthy functioning wetland system. For most new wetlands, successful and complete development can take several years. This project should be fully established (i.e., mature wetland vegetation communities) in about 3 years. In time, the wetland project will provide a feeding refuge for wintering migratory waterbirds for the greater Arlington Valley and southern Arizona.

## **PROJECT EVALUATION**

### **Vegetation**

The third (spring) site visit was undertaken on March 3, 2006. All the wetland units had a tremendous vegetative response (some units up to 90% vegetative cover) during the spring and summer of 2005. Most of the wetland units still had water present in them and each contained a good ratio (50:50) of water to vegetation. It was evident that strips of vegetation were mowed within each wetland cell during the fall of 2005, as per recommendation. All the wetland units were predominantly composed of Japanese millet (*Echinochloa crusgalli*) and Barnyard grass (*Echinochloa muricata*), as per the site visit in September 2005. There was tremendous amounts of litter (dead vegetation) present in some of the units (Unit 4) which would indicate exceptional growth from the prior growing season. In the areas where the water had receded and a mud flat was present a tremendous amount of newly germinated watergrass (millets) was present. The vegetation was in the very early stages of development and sound water management is imperative to its development throughout the spring and summer. Without site management and timely water throughout the growing season, these grasses could easily be out-competed by more xeric species and fail to "seed out"..

The other species planted, alkali bulrush (*Scirpus maritimus*) and smartweed (*Polygonum lapathifolium*) were not witnessed during this site visit but respond to early season drawdowns and cooler soil temperatures. With this in mind, the current

conditions in the wetland units may contribute to increased germination of these species in the upcoming growing season. It seems that the planting was performed correctly and at an adequate seeding rate and chances are good that the bulrush and smartweed seeds that didn't germinate in 2005 have remained viable in the soil.

The irrigations performed throughout the winter by Leon Hardison Farms seemed to be in accordance with the water management guide. Water was allowed to cascade from the upper units to subsequent units and impounded for the duration of the winter months. There are some minor maintenance actions that need to be performed after the water has been drained from all the wetland cells, which are noted in the Infrastructure section below.

Levee side slopes did not appear to have been planted as of March 3, 2006. Species to be planted are a mixture of salt grass (*Distichlis spicata*) and alkali sacaton (*Sporobolus airoides*). Planting of levee side slopes should occur in the fall of 2006 after summer temperatures begin to drop. This item is important to prevent any erosion of the levee side slopes from wind-driven water (wave action) during the winter and rain events throughout the year, which in turn will decrease silt build-up throughout the project.

The soils at the site appear to be quite adequate for the development of moist soil wetlands. The units all seemed to have held water throughout the winter and most were still holding water at the time of the visit.

#### Infrastructure

Construction of the wetland basins infrastructure was completed in the spring of 2004. Major infrastructure components include: concrete lined irrigation supply ditch on the north end of the project, wetland basin levees, wetland basin water control structures, interior water supply ditch, and a drainage ditch on the south end of the project. During the March site visit, these project components were observed and conditions evaluated.

All levees were in excellent condition. Some minor erosion, along the levee side slopes, was observed in a few spots throughout the project. Planting and establishing the grass seed mix on the levees should be a high priority for the fall of 2006. Vegetative cover will reduce erosion and minimize future levee maintenance actions, as well as any silt build-up that may occur. The levee breach between Units 2 & 6 (documented in September 2005 report) that was recommended to be repaired had been done and the unit was functioning as designed. There is some minor levee shaping (side slopes) that needs to be completed at this location after the unit is de-watered.

All water control structures were in excellent structural condition. Some of the structures had mud piled up in front of the stop-logs in order to prevent minor leaking of water through the boards. This is fairly normal with shallow water, seasonal impoundments. A few of the water control structures had some minor erosion around the inlet and outlet ends of the pipes. Most of the major erosion issues that were discussed in the Fall 2005 Report looked to have been addressed and only minor maintenance issues remain. Water control structure #12 (drains central supply ditch into the sump area) has been removed and the levee repaired. The outlet end of the pipe had an erosion problem and severe back-cutting of the levee was addressed in the Fall 2005 Report. This should not be an issue; the central supply ditch can still be drained through Cells 8 & 9. The concrete-lined feeder ditch at the north end of the project has a leak directly adjacent to where the water enters the ditch. This needs to be addressed immediately after irrigation has been completed. See notes on individual cells below for specific infrastructure observations and recommendations.

The central supply ditch and associated water control structures were in good structural condition. During the site visit, erosion directly opposite the water in-flow pipe was observed and appeared to be back-cutting substantially into the levee between the ditch and Cell 8. This issue should be addressed once the irrigation has stopped and the units have been de-watered.

The concrete-lined water delivery ditch (north end of project) is leaking immediately adjacent to the water in-flow. The dirt behind the concrete is gone and the water is slowly leaking into the area directly north of Cell 4. This needs to be addressed as soon as irrigation of the area is completed. Without attention, the concrete will cave in and repairs to the ditch will be much more costly.

## **General Recommendations**

The project is functioning as designed and planned. The moist soil vegetation response to the water management regime has been outstanding. Below are various management and maintenance recommendations for the continued development of the projects vegetation and infrastructure. Regular attention to these recommendations will ensure the projects continued success. All of the recommendations are important; however water management is the most critical concern, particularly its removal from each unit following irrigation. The vegetation chosen for this project is dependent on moist to partially saturated soils. Hence, draining water from the units is extremely important. A complete slow, de-watering of the management units will encourage the moist soil vegetation to germinate and prevent loss of newly sprouted plants by allowing oxygen back into the soil column. In addition, all water should enter the unit through its inlet structure and exit through its outlet structure. Each unit's outlet structure should be connected to its central swale so water can easily and completely drain. Water should not be allowed to "back-fill" into any unit from an outlet structure.

**Central Supply Ditch** – This area should always be kept drained when not irrigating. It is important to keep the ditch clear of any obstructions (*i.e.*, excessive vegetation, etc.) and silt build-up. If this occurs, water will be allowed to stand in the ditch and impede drainage from the adjacent cells. In addition, the area directly across from the irrigation inlet (large plastic pipe) should be fixed once irrigation of the area is complete (between Units 3 & 4). The back-cutting of the levee, if not repaired, may render the road unusable.

**Final Ditch** – This area must be kept clear of excessive silt and vegetation. An annual maintenance regime will prevent any blockages in the drainage of water and assist in maintaining positive flow through the entire system.

**Concrete Supply Ditch** – This ditch needs to be monitored regularly for any potential problems. If erosion adjacent to the ditch and slide-gates is not addressed then the concrete may eventually cave in and cause a much more expensive problem to fix, as well as hinder irrigation of the wetland units.

**Water Management** – Proper and precise water management is the most critical component of any moist soil management routine. A slow, deliberate de-watering of the units between April 1 – April 15 should allow for optimum soil conditions for moist soil

plant germination. The cells should have any mud that was placed in front of the stop-logs removed, as well as remove enough individual boards to allow for water to cascade over the top board as it drains. Continue to remove additional boards as the water level lowers to allow for a small cascading of water into the adjacent cell/ditch. Once the cells are completely de-watered the vegetation should begin to germinate on and adjacent to mud flats. Allow 2 – 4 weeks for the vegetation to germinate and begin to grow.

Over the course of the summer, supplemental water is necessary to grow the vegetation and allow it to mature in order to produce seed. Once the vegetation is approximately 6 – 8 inches tall, supplemental water should be added to flush the cells. It is important not to “over flood” the vegetation. Water levels should **not** exceed 30 - 40% of the total height of the plants. This process should be repeated every 1 – 2 weeks throughout the summer in order to keep the soil moist, as needed. Once established, moist soil vegetation can grow in saturated soils and even while inundated, so it's important to take great care during the first few weeks while the plants are establishing themselves.

**Wetland Vegetation** – All management units showed a great vegetative response during the first growing season (2005) and many seeds were produced. This should “set the table” in 2006 for the vegetation response to be comparable to last year. In moist soil environments, once the plant community becomes established, the vegetation begins to decline after the first year in both seed production and species diversity. With that in mind, it is important to set back succession every 2 – 3 years by lightly disking the management units. This disturbance will turn the soil over and break-up large amounts of thatch (dead plant material) that have accumulated within the management units and allow them to be broken down by micro-organisms within the soil stratum. In addition, if fire is a management tool that the landowners and manager feel comfortable with then it could be used to remove dead plant material in addition to disking. Although fire is an excellent tool to remove unwanted vegetation (dead or alive), the cells still need to be lightly disked every couple years in order to disturb the soil, which in turn will help to increase the amount of moist soil vegetation present within the management units in subsequent seasons.

**Levee Cuts** – The levee cuts that were reported in the September 2005 monitoring report have all been fixed as of March 3, 2006.

**Levee Side Slopes** – The grass seed mix designated for the levee side slopes has still **not** been planted. Establishment of these grass species along the levees will help reduce erosion along the levees, as well as reduce weed growth. This should be done in the fall as soon as temperatures and soil moisture conditions warrant.

**Weed Control** – Weeds in the moist soil units should be controlled as soon as witnessed by the manager. Bermuda grass and tamarisk are two species of special concern for that area. Very few weeds were witnessed in the units as of the March 2006 site visit but the spring and summer are excellent times for these species to germinate and encroach on the wetland units. Herbicides should be used with caution so as to not damage the moist soil plant community or the adjacent wetland riparian areas. It is recommended, if herbicide is needed, to spot treat individual plants or areas instead of aerial or boom applications.

## **EXPECTATIONS AND FUTURE PERFORMANCE**

If the above recommendations are followed, the moist soil wetland project should produce another crop of moist soil vegetation, which in turn will provide outstanding habitat for wintering and migrating waterfowl. Proper management and maintenance of water, vegetation and infrastructure will be necessary. Any structural problems to water control structures or levees (*e.g.*, erosion) should be addressed immediately. Silt will continue to accumulate in the drainage swales, ditches, and in front of the water control structures as part of normal project operations. These accumulations should be removed as necessary to maintain adequate drainage and watering of the units.

The moist soil units should attract ducks and other waterbirds during the fall and winter. While here, the birds will feed on the crop of seeds that were produced during the growing season. In addition to a food resource, these seeds are also important for next year's seedbank. Without a good crop of seeds the management units would need to be planted every year in order to grow the watergrasses, etc. that are needed as a food resource to waterfowl. The smartweed and bulrush that was planted in addition to the watergrass should still remain viable in the soil and when conditions warrant will germinate at a greater rate than 2005.

This is the final monitoring session and report under the current contract. Ducks Unlimited will work with Duke Energy to extend the current contract before the before the fall of 2006. If a new contract extension is finalized, the next monitoring session will be conducted in September of 2006.

## **SUMMARY**

The Duke Energy Arlington Valley Moist Soil Wetland Project has developed nicely. The vegetation present within the management units was outstanding for a first year project. In addition, the shallow water present throughout the entire project looked exactly like it's supposed to. A few ducks (Cinnamon teal) were present on the site during the March 2006 site visit and there is no doubt that more ducks were present over the course of the winter. The cells look as if they have been devoid of any remaining seeds (lack of seeds floating on the water), which would indicate a strong presence of waterfowl and other waterbirds over the course of the winter. In addition to providing quality waterfowl habitat during the winter, the management units will provide outstanding habitat for quail, dove, deer, neo-tropical migrant songbirds, as well as a whole suite of rodents, reptiles and amphibians.

Overall, the condition of the infrastructure is in excellent shape. It is important to repair the few minor erosion problems that are highlighted in this report. Routine maintenance throughout the life of the project will be necessary to maintain proper water levels and grow robust stands of moist soil vegetation. Planting the levees with the salt grass/alkali sacaton seed mix is a high priority for this fall, as weather permits. Finally, a percolation test may need to be completed to determine how much water is being lost through the bottom of the wetland cells into the ground. The test coupled with agreeing on an acceptable level of stop-log leakage will go a long way in determining how much water is needed on an annual basis to run the project.

# **PHOTO DOCUMENTATION**

Photo documentation of moist soil wetland vegetation, water control structures, levee side slopes, with associated management recommendations.

### Unit Observations and Recommendations

Permanent photo points were established for all moist soil wetland units. Stakes with flagging were set in the northwest corner of each unit. Main unit body (looking southeast) and western levee pictures (looking south) were taken from this point. In addition, pictures of all the water control structures were taken from within the unit looking at the inlet end of the structure, as well as most of the outlet ends.

**Unit 2** – This moist soil wetland unit was in great condition. The unit had approximately 90% vegetative coverage during the September 2005 site visit. The unit had a good mix of vegetation and open water and ducks were present on the unit at the time of the site visit. The vegetation had been mowed in strips before the unit was flooded in the fall, as recommended. No boards were in the water control structure and water was slowly draining into Unit 6. The outlet structure was in excellent shape (structurally speaking) and had some minor erosion around the riser due to digging up (shovels) mud to place in front of the stop-logs (probably to prevent some minor leakage through the boards). The water delivery structure on the concrete-lined feeder ditch had been repaired, as per recommendation from previous monitoring report. In addition, the levee breach that was cut by Leon Hardison Farms to provide drainage into Unit 6 had been fixed, as well as removal of the black poly. Minor levee shaping needs to be done on both sides of the levee to maintain the levee slope where the breach was repaired. Overall, Unit 2 looked to be in great shape and was functioning as designed.



Unit 2 - Main body of unit looking SE from NW corner.



Unit 2 - Levee Bravo looking south (\*note: lack of vegetation on levee slopes).



Unit 2 - Water control structure # 5 looking south, slowly draining water into Unit 6 (\*note: minor erosion/soil disturbance around structure).



Unit 2 - Levee Foxtrot (between Unit 2 & 6) looking west. This area was breached and has been repaired (\*note: minor levee shaping needed on both sides after unit is de-watered).



Unit 2 - Slide-gate (water control structure #2) off concrete feeder ditch that has been repaired from previous visit (\*note: smooth slope and no exposed pipe).

**Unit 4** – A small amount of water was present in the unit, mostly in the central drainage swale, at the time of the site visit. This unit had the most prolific growth of millet of all the moist soil wetland units (approximately 95% coverage) during the September 2005 site visit. There was a large amount of litter (dead plant material) throughout the unit due to growth during the previous summer. Again, it was obvious the unit had strips mowed in the vegetation before flooding occurred, as per recommendation, and a good ratio of open water to vegetation was attained. All structures and levees looked sound and adequate, only some minor erosion around the structure was observed. There is some excess build-up of vegetation in front of water control structure #9 that should be removed in order to re-connect the central drainage swale to the structure. This action should prevent any ponding and assist in the complete drainage of the unit. Water was entering the unit through the structure, with boards installed, from the Central Supply Ditch (CSD). Irrigation water should not be allowed to enter the units from the “bottom” through the structures designed to drain the unit. Once the draining of the upper units is complete the CSD should be drained to prohibit “back-filling”. Overall, the unit looked great with most everything functioning correctly and solid moist soil vegetation growth throughout the unit.



Unit 4 – Water control structure #9 looking south from inside the unit (\*note: minor erosion around structure and water back-filling into unit from CSD).



Unit 4 – Main body of unit looking SE from NW corner (\*note: large amount of green vegetation).



Unit 4 – Levee Echo looking south (\*note: lack of vegetation on levee slopes).



Unit 4 – Germination of water grass inside the unit (from east road looking NW).



Unit 4 – Central drainage swale inside unit looking south (\*note: water gathering in swale and good moist soil plant germination).



Unit 4 – From water control structure #9 looking north into unit (\*note: vegetation gathering in front of structure, potentially impeding drainage).



Unit 4 – Water delivery structure for unit in NE corner (\*note: everything is in excellent shape).

**Unit 6** – The unit contained lots of water (nearly entire unit was still holding shallow water). The water and vegetation looked great. The area seemed to be holding very shallow water across nearly the entire site and there was outstanding germination (very early stages) throughout the unit on the many mud flats within the management unit. Plant growth should increase as the water is lost and mud flats are created. The entire infrastructure looked to be in excellent condition. The levee, to the north, between Unit 6 & 2 was repaired and water was draining as designed from north to south. In addition, a couple salt cedars were spotted in the middle of the unit which will require some spot treatment to prevent any further infestation. Overall, Unit 6 looked to be in excellent shape with every part functioning as designed.



Unit 6 – Main body of unit looking SE from NW corner (\*note: very shallow water throughout the unit and moist soil germination in the foreground).



Unit 6 – Levee Bravo looking south from NW corner of unit (\*note: lack of vegetation on levee slopes).



Unit 6 – Water control structure #6 (\*note: boards are installed with mud piled in front to prevent leakage).



Unit 6 – Water control structure #7 which drains into Central Supply Ditch (\*note: looks to be functioning as designed and in excellent shape).



Unit 6 – Outlet end of water control structure #6 into Unit 8 (\*note: minor erosion that looks to have been repaired and rip-rap added, looks to be functioning as designed).

**Unit 8** – This unit looked outstanding at the time of the site visit. All levees and structures were in excellent condition. The water was shallow and clear and no seeds were found floating in the unit (indicates potential high bird-use over winter). The only item to address, if manager determines it's a problem, has to do with placing mud in front or behind the stop-logs to stop water from leaking out. Shoveling mud is not labor intensive and if it works for the landowner/manager then nothing needs to be addressed in Unit 8. Sometimes wooden boards don't seal completely when they are just partially submerged for only short periods of time. One possible solution could be to run a bead of caulk between the boards when they are placed in the structure.



Unit 8 – Water control structure #13 looking SE (\*note: minor soil disturbance around structure and mud behind boards to prevent water leakage).



Unit 8 – Main body of unit looking SE from NW corner.



Unit 8 – Levee Bravo looking south (\*note: levee side slopes need to be planted).



Unit 8 – Water control structure outlet into Unit 11 (\*note: no erosion and rip-rap in place, looks great).



Unit 8 – Levee Golf between Unit 8 and Unit 11 (\*note: levee side slopes need to be planted, levee is in excellent shape).

**Unit 9** – This unit had the least amount of millet germination of all the management units during the September 2005 site visit and it had poor germination compared to the other units this spring as well. The only water remaining was located within the central drainage swale. In addition, this was the only area with any substantial germination of moist soil vegetation. The levees and structures all looked to be in good condition. The major erosion that occurred from the outlet end of water control structure #19 had been repaired. The water control structure was moved further to the west along Levee Mike to help prevent the washing out of the ditch and back-cutting of the levee. The road now is passable with an automobile, before the erosion was so bad it prohibited driving a car on that portion of the levee. This unit originally drained directly into the sump area (East Ditch) and had much more erosion than any other management unit. The problem has been addressed and looks to be working, other than some minor erosion of the ditch as it enters the East Ditch. This can be addressed with some fabric and additional rip-rap put in place. Overall, this unit seemed to be functioning correctly and other than some minor erosion issues near the East Ditch, not much work is required in Unit 9. In addition, it appears that this unit wasn't land leveled as precise as the other units which may cause a majority of the cell to not be inundated as long as needed for plant growth. It is recommended that water be kept on this unit for longer periods of time to help spur on plant growth.



Unit 9 – Former outlet end of water control structure #19 looking SE as it drained to the East Ditch that needed major repairs, as per the last monitoring report (\*note: structure and pipe were removed to prevent additional back-cutting and erosion, looks good).



Unit 9 – Outlet of water control structure #19 into ditch before emptying into sump area (\*note: erosion of ditch area before water enters the East Ditch).



Unit 9 – Main body of unit looking SE from NW corner (\*note: less germination compared to other management units).



Unit 9 – Levee Mike looking south (\*note: lack of vegetation on levee slopes and poor germination of vegetation inside the unit).



Unit 9 - Moist soil vegetation growing inside the unit along the central swale.



Unit 9 - Water control structure #19 from inside the unit looking south (\*note: fresh dirt, which indicates the structure was moved to the west from its original position to decrease erosion as it entered the East Ditch).



Unit 9 – Water control structure #19 (close-up) (\*note: mud in front of boards and some vegetation in front of structure that should be removed).

**Unit 11** – All levees and water control structures in this unit were in excellent condition. Water grass germination is occurring within the unit on the mud flats (very early stages). Heavy shorebird use was witnessed on the small ephemeral pools and adjacent mud flats within Unit 11. Again, all the levees need to be planted in order to prevent erosion of the slopes. In addition, some minor excavation could be done to connect the central drainage swale to the water control structure to prevent ponding in front of the pipe, as well as the final ditch to allow water to drain freely out of the unit. Overall, the unit looked to be in great shape with no major issues to address.



Unit 11 – Main body of unit looking SE from NW corner (\*note: lack of germination and mud flats).



Unit 11 – Levee Bravo looking south (\*note: lack of vegetation on levees).



Unit 11 – Water control structure #14 looking south (\*note: boards still in the structure with mud piled in front).



Unit 11 – Water control structure #14 outlet that drains into final ditch (\*note: vegetation and silt building up in ditch).



Unit 11 – Final ditch looking east (\*note: vegetation and silt building up, maintenance needed to keep clear of obstructions).



Unit 11 – Small ephemeral pool and mud flats within unit (\*note: excellent germination across mud flats and great shorebird habitat).

**Central Supply Ditch** – All water control structures were in good shape with only some minor erosion around the pipes, except for the area between Units 3 & 4 where the water is entering the ditch from the pump. This area has some major erosion and is back-cutting into Levee India's side slope. This should be repaired as soon as irrigation is completed and the ditch has dried up. Something should be installed along the levee to dissipate the water's energy as it enters the ditch in subsequent years. Annual maintenance of the ditch should occur, at which time vegetation and excessive silt should be removed. This will allow the drainage of the upper units into the ditch and prevent any "back-filling".



Central Supply Ditch – Water control structure #11 that feeds Unit 8, looking south (\*note: minor erosion around the riser, functioning as designed).



Central Supply Ditch – Looking from west to east (\*note: small amounts of vegetation that will eventually need to be removed to keep the ditch clear of obstructions).



Central Supply Ditch – Erosion/back-cutting caused by water between Units 3 & 4 (\*note: need for something to dissipate water's energy as it enters the ditch, fabric and rip-rap recommended).



Central Supply Ditch – Water entering Unit 9 from the ditch (\*note: it is recommended to remove the boards and let the water flow freely into Unit 9 to help with vegetation growth).

**Concrete Feeder Ditch** – This is the ditch that feeds all the water to the project site. The slide gate that feeds water into Unit 2 was repaired. There was no exposed pipe and rip-rap was placed near the outfall and it looked to be functioning fine. In the location where the water is entering the ditch there is a major leak and wash-out behind the concrete. This needs to be repaired immediately after irrigation is completed. If this issue is not addressed the concrete will cave-in which will hinder the ditches ability to get water to all the management units, not to mention be more costly to repair and additional water expenses. Other than this issue, the ditch looks to be in good shape.



Concrete Feeder Ditch – NE corner of project site where water enters the ditch north of Unit 4 (\*note: erosion along concrete and water leaking out of ditch).



Concrete Feeder Ditch – From west end of project site looking east (\*note: in excellent shape and working as designed).