

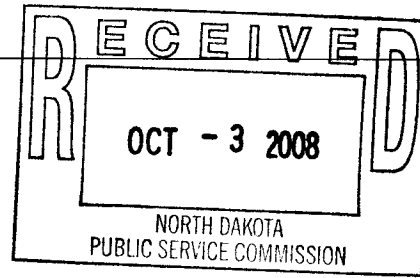
**BASIN ELECTRIC
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September 29, 2008

Darrell Nitschke
Director of Administration
Public Service Commission
600 East Boulevard Avenue, Dept 408
Bismarck, ND 58505-0480



Re: Case Number PU-04-109
Route Permit No. 95 for Antelope Valley Station Raw Water Pipeline
Beulah, North Dakota

Dear Mr. Nitschke:

The following is an annual update report for the Antelope Valley Raw Water Pipeline project activities that has occurred 2008.

As stated in correspondence to your agency on October 23, 2007, Basin Electric Power Cooperative (Basin Electric) had identified three areas that required re-seeding activities. Due to the extremely dry conditions that this region of North Dakota experienced in the fall of 2007 and thru mid summer 2008 precluded re-seeding efforts at that time.

A spring assessment by Basin Electric staff indicated that several areas that required implementing a noxious weed control program on the Right of Way. Approximately 80 acres were sprayed.

In August 2008, KDK Consulting performed a Grassland Vegetative Cover Assessment. (Attachment A) With the current adequate moisture being available, a fall seeding plan has been implemented in Areas B&C. The Vegetative Cover Assessment recommended that an additional noxious weed spraying effort be undertaken on Area A. The weed spraying along with timely mowing will greatly enhanced the reestablishment of vegetative cover and it was recommended that re-seeding Area A was not required.

A Woodland species survivability assessment was also performed in 2008. (Attachment B) This assessment indicates 4828 living trees/shrubs at the time of the assessment. This is greater than the 3:1 ratio requirement of the project.

Sincerely,

Cris Miller
Sr. Environmental Project Administrator

/gmj
Enclosure
cc: Mark Nelson (AVS)
Jack Holt

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Annual Update Report

Basin Electric Power Coop Inc.

Attachment A

**GRASSLAND ASSESSMENT OF VEGETATIVE COVER WITHIN 3 AREAS
ALONG AVS RAW WATER PIPELINE**

Conducted by KDK Consulting on August 14, 2008

GRASSLAND ASSESSMENT OF VEGETATIVE COVER WITHIN 3 AREAS ALONG AVS RAW WATER PIPELINE

**Conducted by KDK Consulting on August 14, 2008
In accordance with Agreement #552805**

An assessment of plant cover and species frequency, within 3 areas of concern along the AVS raw water pipeline, as outlined by Basin Electric Power Cooperative (BEPC) was conducted by KDK Consulting on August 14, 2008. Mr. Jack Holt of BEPC assisted with field identification of the 3 areas prior to initiation. Thirty samples using a 1/4m² frame for aerial cover and species frequency were taken randomly within each of the 3 sites. Tables 1 through 6 show the sampling results. The following are interpretation of results and recommendations for each area of concern.

Segment A

Segment A had an overall aerial cover of 92.5% (bare ground = 7.5%) which is above the 83% needed within restored native grasslands to meet PSC guidelines as seen in Table 1. Of the aerial cover, 33.9% was perennial grass which is nearly twice the amount of annual forb cover (18.3%) that was recorded. The frequency of species recorded within Segment A as seen in Table 2 helped reinforce the positive establishment. Six perennial native grasses were recorded at a frequency over 20% with four of those being over 60%. Based on experience, this site will establish into a diverse native grassland in a couple of years as the perennial natives outcompete the annual forbs for niches and available resources. This process could be accelerated through timely mowing which would stress the annual forbs and allow the perennial natives to dominate. The negative issue regarding this area is the presence of noxious weeds. A potentially harmful amount of absinth wormwood is present (17% frequency), and though not recorded, leafy spurge was present within the segment. Timely spraying of these noxious weeds is imperative to the successful development of this area. The spraying is also needed to the north outside of the area delineated for this survey.

Segment B

Segment B had an overall aerial cover of 89.5% (bare ground = 10.5%) which is above the 83% needed within restored native grasslands to meet PSC guidelines as seen in Table 3. Of the aerial cover, the perennial grass component was down to 19.7% and was less than the annual forb cover (28.3%) that was recorded. The frequency of species recorded within Segment B as seen in Table 4 reinforces the downward turn in native grassland establishment. Four perennial native grasses were recorded at a frequency over 20% with only one of those being over 60%. Based on experience, this site will not establish into a diverse native grassland without reseeding. Even the areas toward the north end of the site which have a decent amount of perennial grass cover are dominated by one species (slender wheatgrass) which is a decreaser over time. The grass species

are not as robust as the plants seen in Segment A. One positive issue is the lack of noxious weeds across the site. Absinth wormwood was observed along the fence on the south boundary, but not within the site itself. This area does provide obstacles in successful reestablishment due to the soils appearing to have an increased level of salinity in it (Saline Lowland ecological site). The presence of foxtail barley at a level of 17%, even though it was not likely planted, provides insight into the soils characteristics. The seed mix may need to be adjusted to include species that are more salt tolerant if reseeding is initiated. I would suggest reseeding the entire area, but if this is not possible there are two areas that need reinforcement. These include: 1) an area approximately 250 yards long from the north fence by the yard and to the north; 2) the area south of the pipe with the blue cap to the road.

Segment C

Segment C had an overall aerial cover of 84.3% (bare ground = 15.7%) which barely exceeds the 83% needed within restored native grasslands to meet PSC guidelines as seen in Table 5. Of the aerial cover, the perennial grass component was down to a mere 2.8% and was far less than the annual forb cover (60.3%) that was recorded. The frequency of species recorded within Segment C as seen in Table 6 reinforces the downward turn in native grassland establishment. Two perennial native grasses were recorded at a frequency over 20% with none being over 60%. Based on experience, this site will not establish into a diverse native grassland without reseeding. The grass species are not as robust as the plants seen in Segment A. One positive issue is the lack of noxious weeds across the site. This area does provide obstacles in successful reestablishment due to the soils appearing to have an increased level of salinity in it (Saline Lowland ecological site) as was seen in Segment B. The presence of foxtail barley at a level of 40%, even though it was not likely planted, provides insight into the soils characteristics. The seed mix may need to be adjusted to include species that are more salt tolerant if reseeding is initiated. I would suggest reseeding the entire area is necessary for any positive results to occur in the near future.

Attachment B

**WOODLAND PLANT SURVIVABILITY MONITORING
IN HARMONY LAKE WMA**

**WOODLAND PLANT SURVIVABILITY MONITORING
IN HARMONY LAKE WMA**

**Conducted by KDK Consulting on August 9, 2008
In accordance with Agreement #552805**

A survival count within 5 block plantings within the Harmony Lake WMA, planted in the spring of 2007, was conducted by KDK Consulting on August 9, 2008. Variable results were seen within and across blocks as found in Tables 1 through 6. The overall 84.7% survival (4828 living trees/shrubs from a total of 5702 potential trees/shrubs evaluated) is slightly lower than the 90% survivability anticipated prior to project initiation. The 4828 living replanted trees/shrubs are greater than the 3:1 ratio for individuals that were disturbed (1,368 disturbed * 3= 4,104) based upon the January 2007 Woody Species Planting Plan submitted for NDPSC review.

The survival within individual blocks ranged from 79.2% in Block 3 to 90.4% in Block 1 with the overall average amongst the five areas being 84.7%. Survival among rows within each block was highly variable as well. Sixteen of the 52 rows had a survival percentage higher than the anticipated 90%. Block 1 alone had ten rows with a survival percentage over 90%. Blocks 2 and 3 had four and two rows, respectively, that met the anticipated percentage. Blocks 4 and 5 had no rows that met the 90% threshold. Overall, the rows varied from a low survival of 60.2% to a high of 98.2%.

Field conditions during and subsequent to planting may have led to the lower than anticipated result. Also, there appeared to be browsing within the plantings which may have caused the death of certain palatable species. The data provided within the tables provides sufficient information to aid in any additional efforts that may need to be undertaken based on this evaluation.