

**TECHNICAL MEMORANDUM**  
**Region C Water Planning Group**  
**Livestock Demand Projections**

**ALAN PLUMMER ASSOCIATES, INC.**

PROJECT: 0312-041-01

DATE: July 30, 2009

PREPARED FOR: Region C Water Planning Group

PREPARED BY: Alan Plummer Associates, Inc.

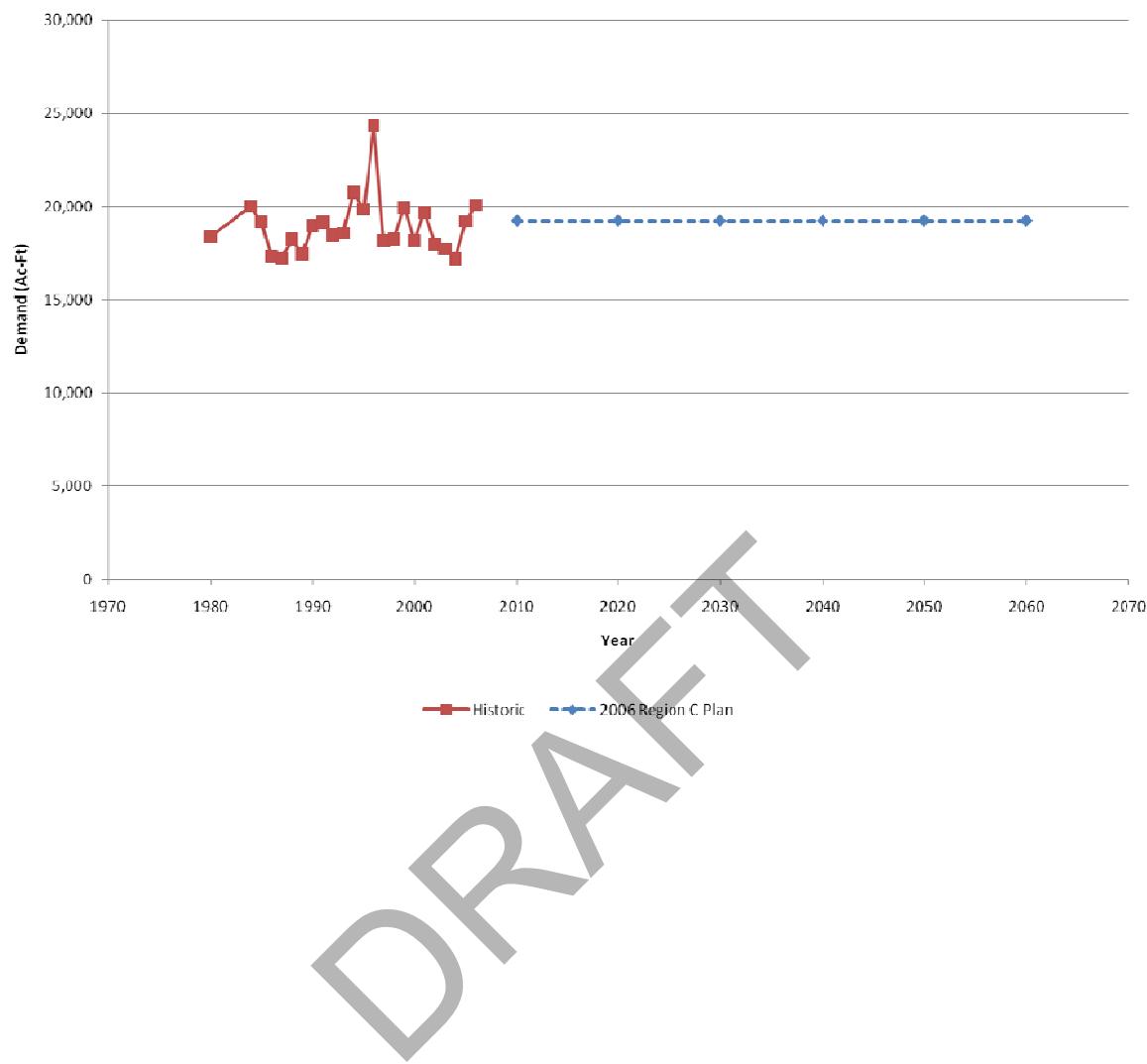
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### **Background**

Municipal water demand projections in the 2006 Region C Plan were based on per capita dry-year water use and the adopted population projections. Projections of the livestock demand relied on the analysis of historical trends and Texas Water Development Board (TWDB) draft projections. The TWDB Water Uses Section conducts the Annual Survey of Ground and Surface Water Use to collect current, accurate information on quantities, sources, and related water use data. To gather additional information regarding irrigation and livestock, questionnaires were mailed to the 16 County Agricultural Extension Agents. Collected data was then used to develop summary water use information for livestock water use estimates.

The most recent livestock water use estimates available from the TWDB are for the year 2006. Attachment A provides a comparison of historical livestock usage and projections by county in Region C. Figure 1 provides a comparison of livestock water usage and projections in Region C. In 2006, the Region C livestock water demand was approximately 20,000 acre-ft/yr. As noted in Figure 1, historical livestock water use is consistent with the adopted 2006 Region C projections. For the purpose of the 2011 Regional Water Plan, no changes to the livestock water use projections are recommended at this time.

**Figure 1. 2006 Region C Livestock Demand Projections**



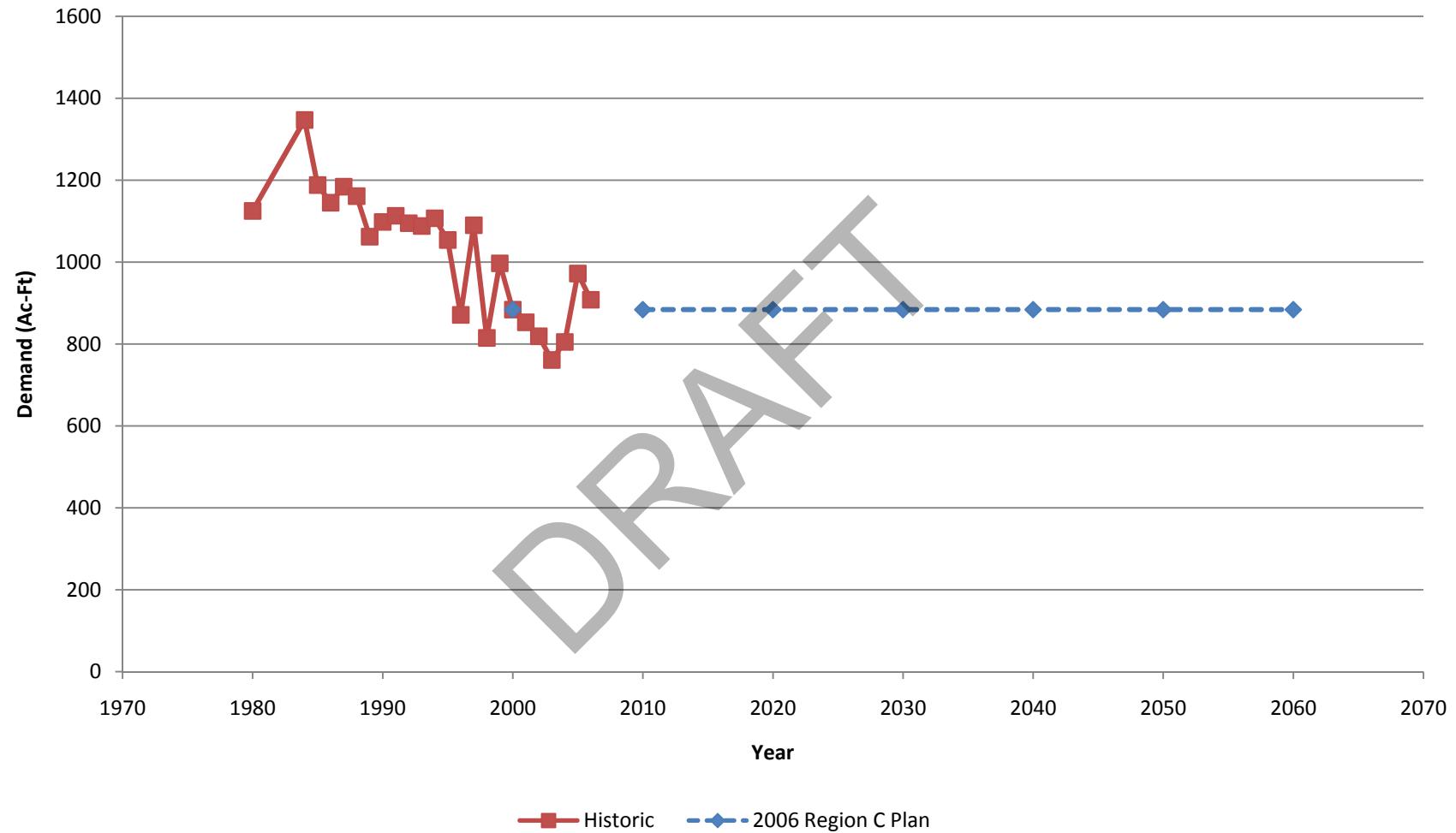
**Table 1. 2006 Region C Livestock Water Consumption Projections**

County	Year						
	2000	2010	2020	2030	2040	2050	2060
Collin County	884	884	884	884	884	884	884
Cooke County	1,898	1,898	1,898	1,898	1,898	1,898	1,898
Dallas County	482	482	482	482	482	482	482
Denton County	1,235	1,235	1,235	1,235	1,235	1,235	1,235
Ellis County	1,183	1,183	1,183	1,183	1,183	1,183	1,183
Fannin County	1,270	1,270	1,270	1,270	1,270	1,270	1,270
Freestone County	1,528	1,528	1,528	1,528	1,528	1,528	1,528
Grayson County	1,297	1,297	1,297	1,297	1,297	1,297	1,297
Henderson County	854	854	854	854	854	854	854
Jack County	1,025	1,025	1,025	1,025	1,025	1,025	1,025
Kaufman County	1,545	1,545	1,545	1,545	1,545	1,545	1,545
Navarro County	1,543	1,543	1,543	1,543	1,543	1,543	1,543
Parker County	1,856	1,856	1,856	1,856	1,856	1,856	1,856
Rockwall County	131	131	131	131	131	131	131
Tarrant County	803	803	803	803	803	803	803
Wise County	1,714	1,714	1,714	1,714	1,714	1,714	1,714
Region C Total	<b>19,248</b>						

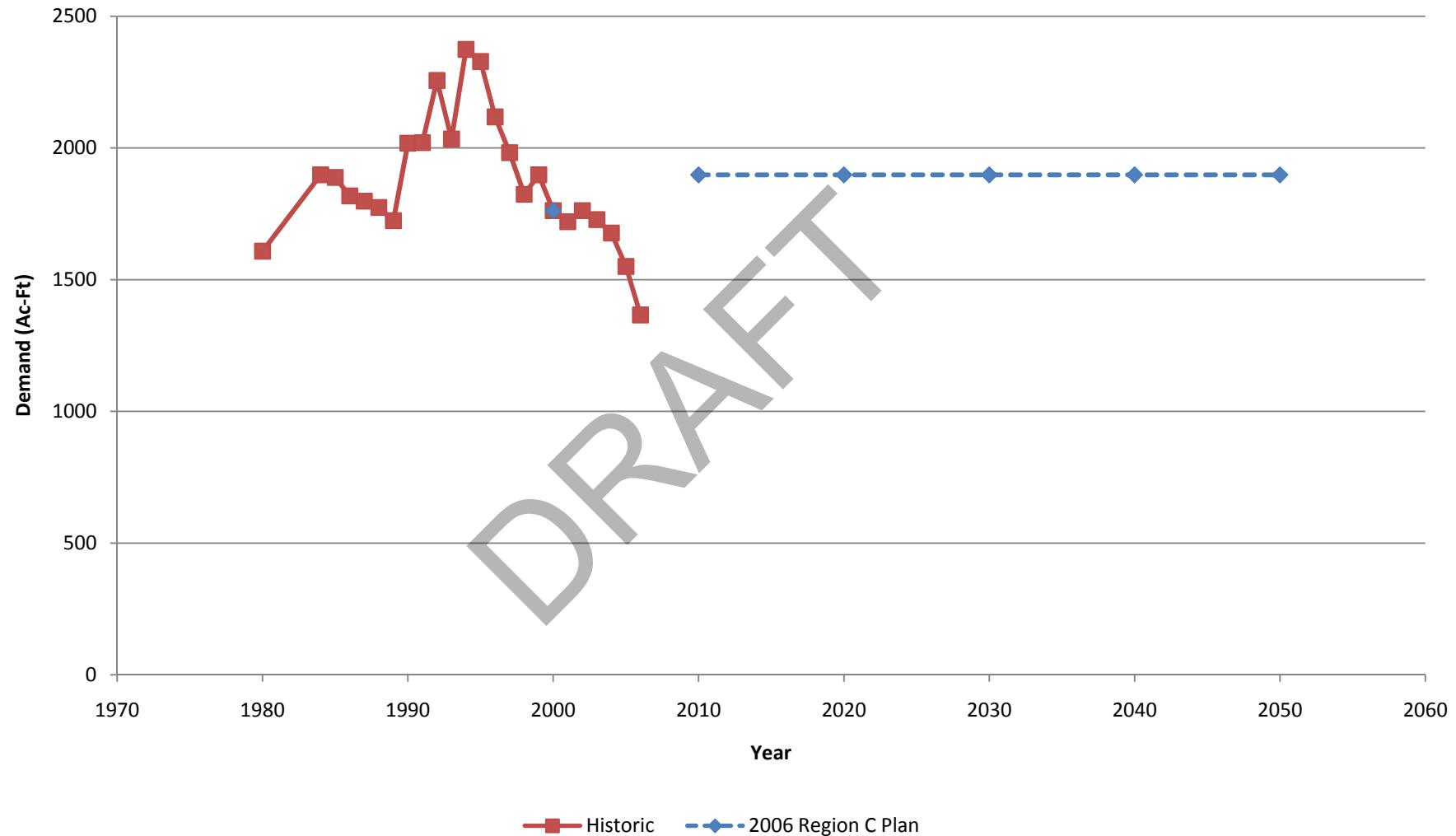
**Attachment A**  
**Livestock Demand by County**  
**Including 2006 Projections**

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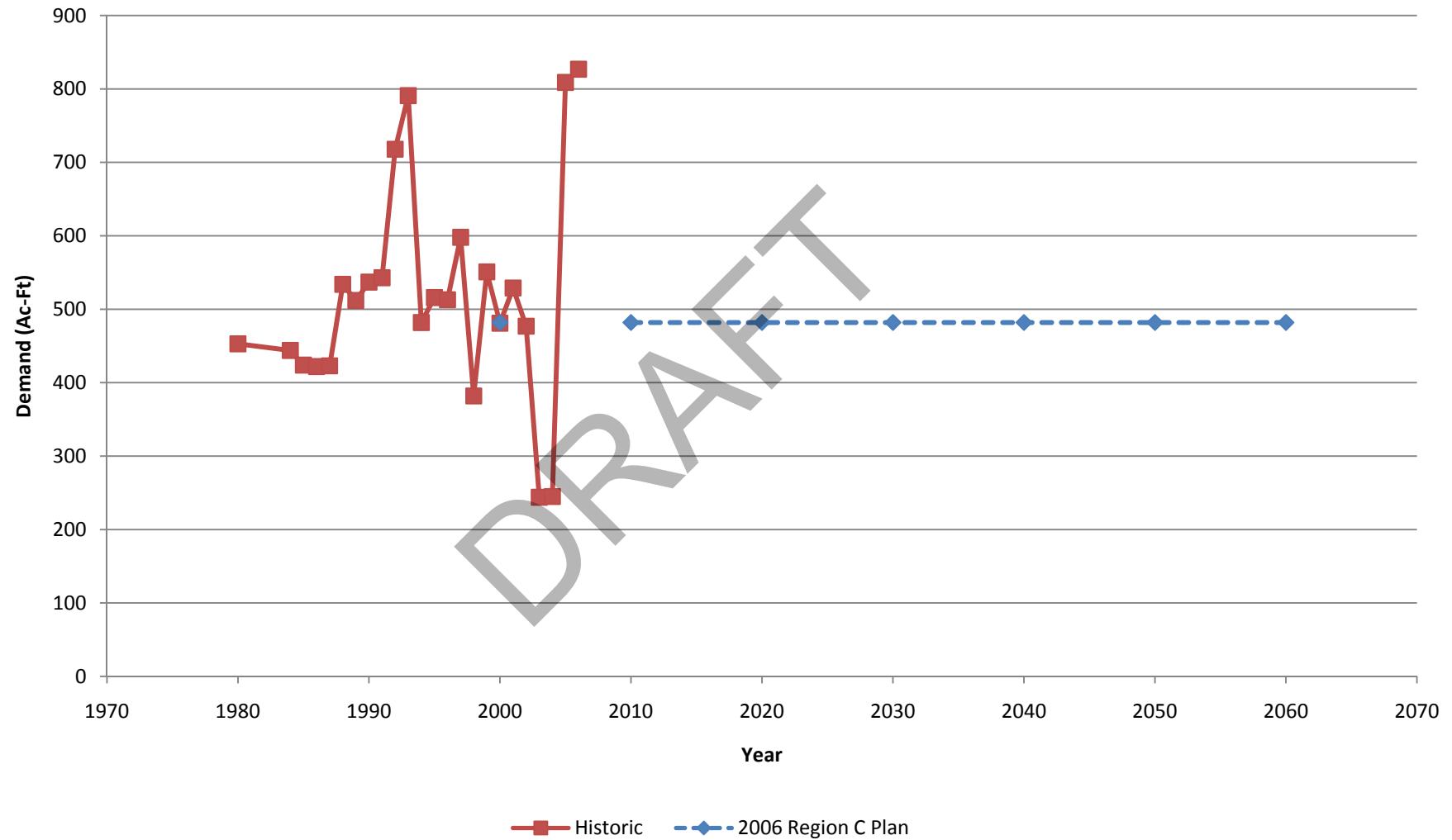
**Figure 1. Collin County Livestock Demands**



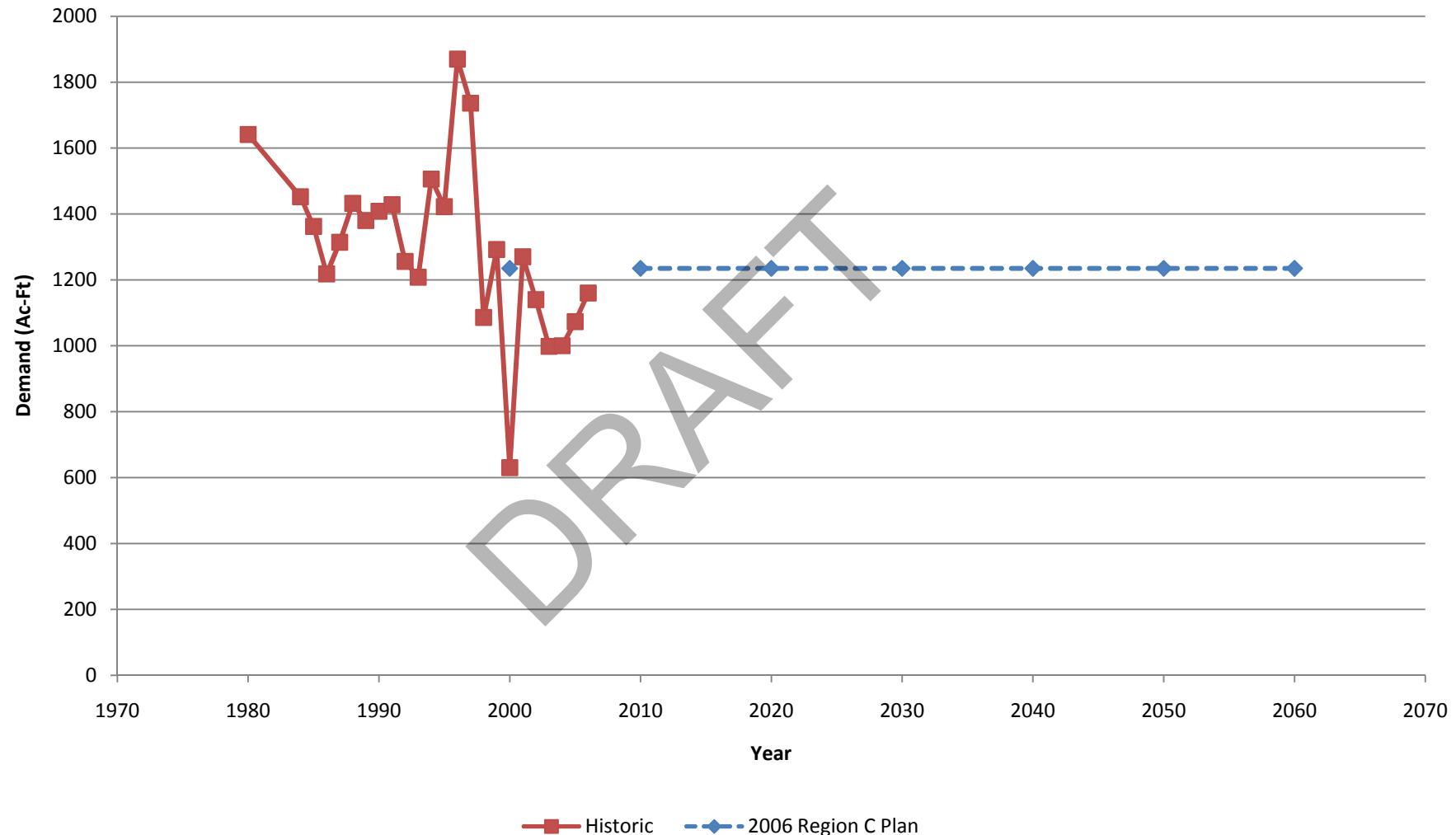
**Figure 2. Cooke County Livestock Demands**



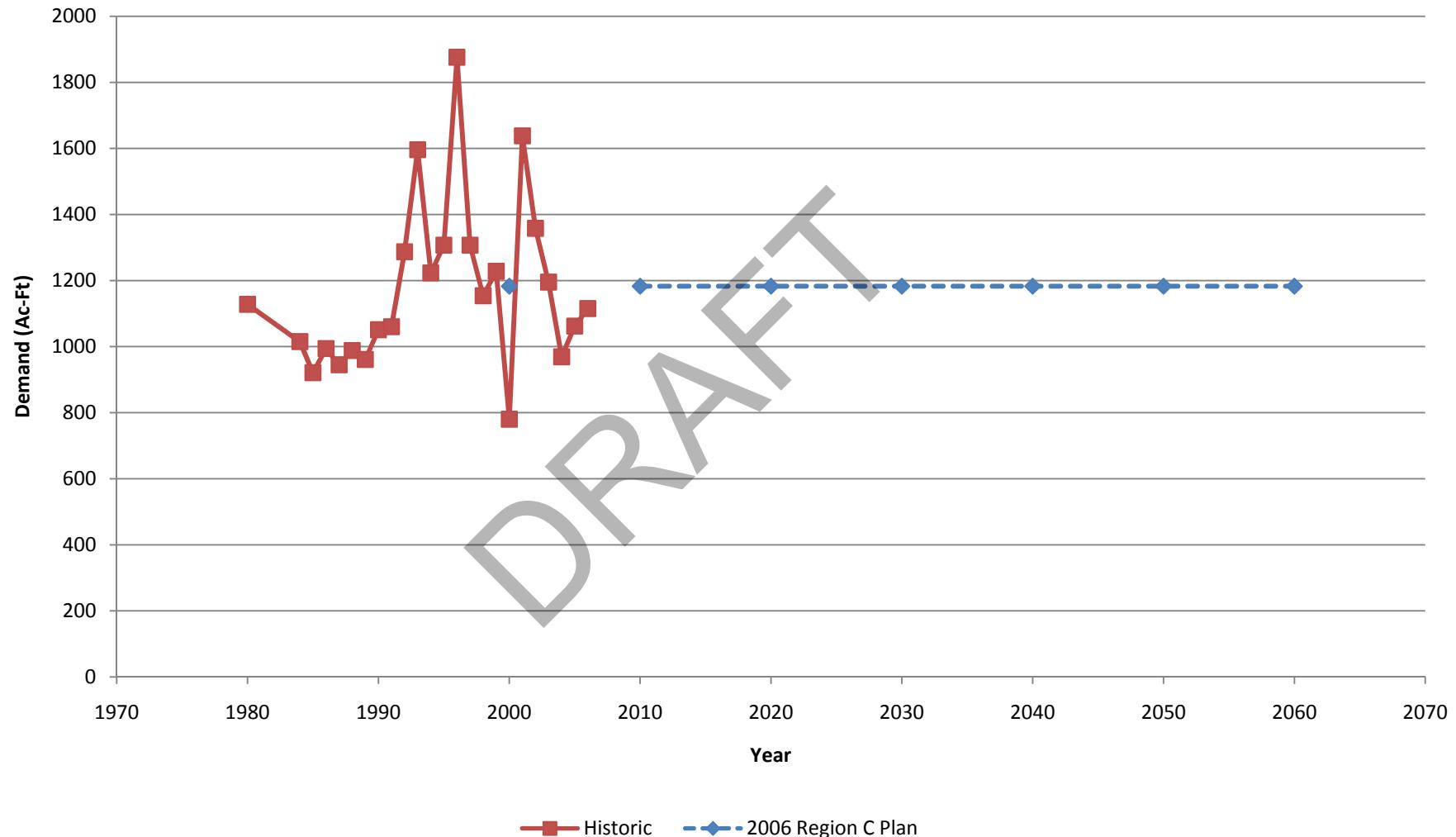
**Figure 3. Dallas County Livestock Demands**



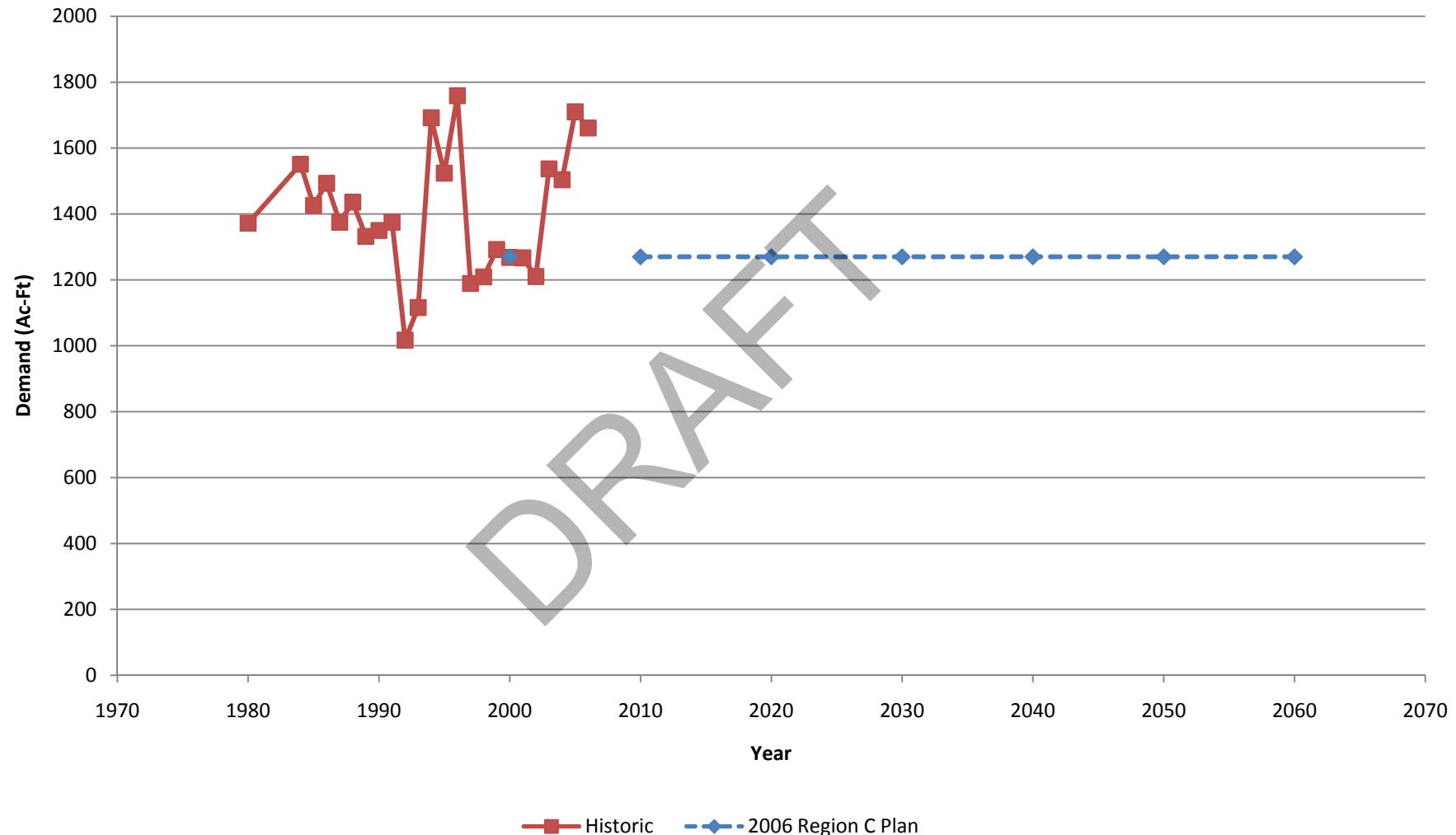
**Figure 4. Denton County Livestock Demands**



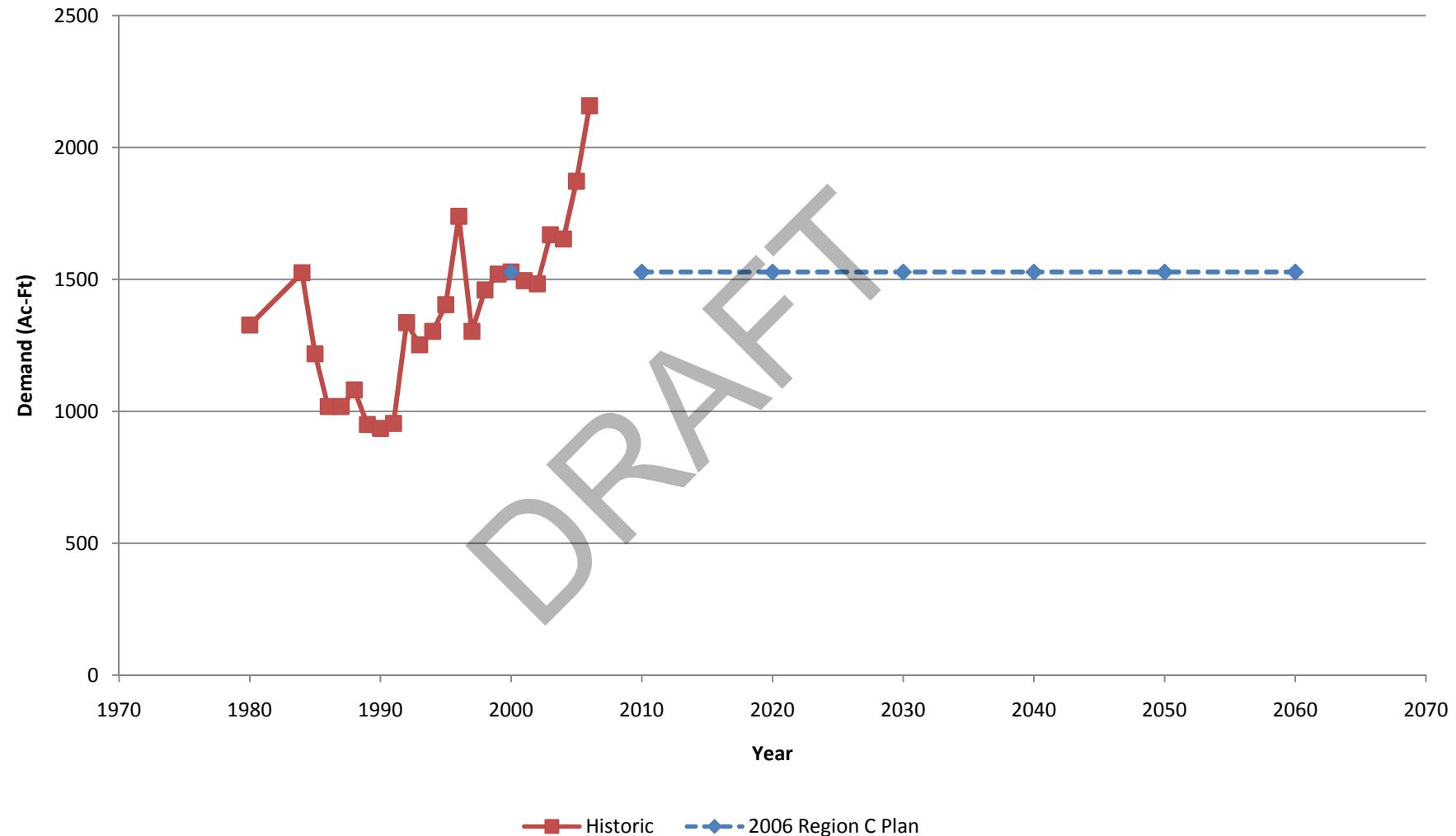
**Figure 5. Ellis County Livestock Demands**



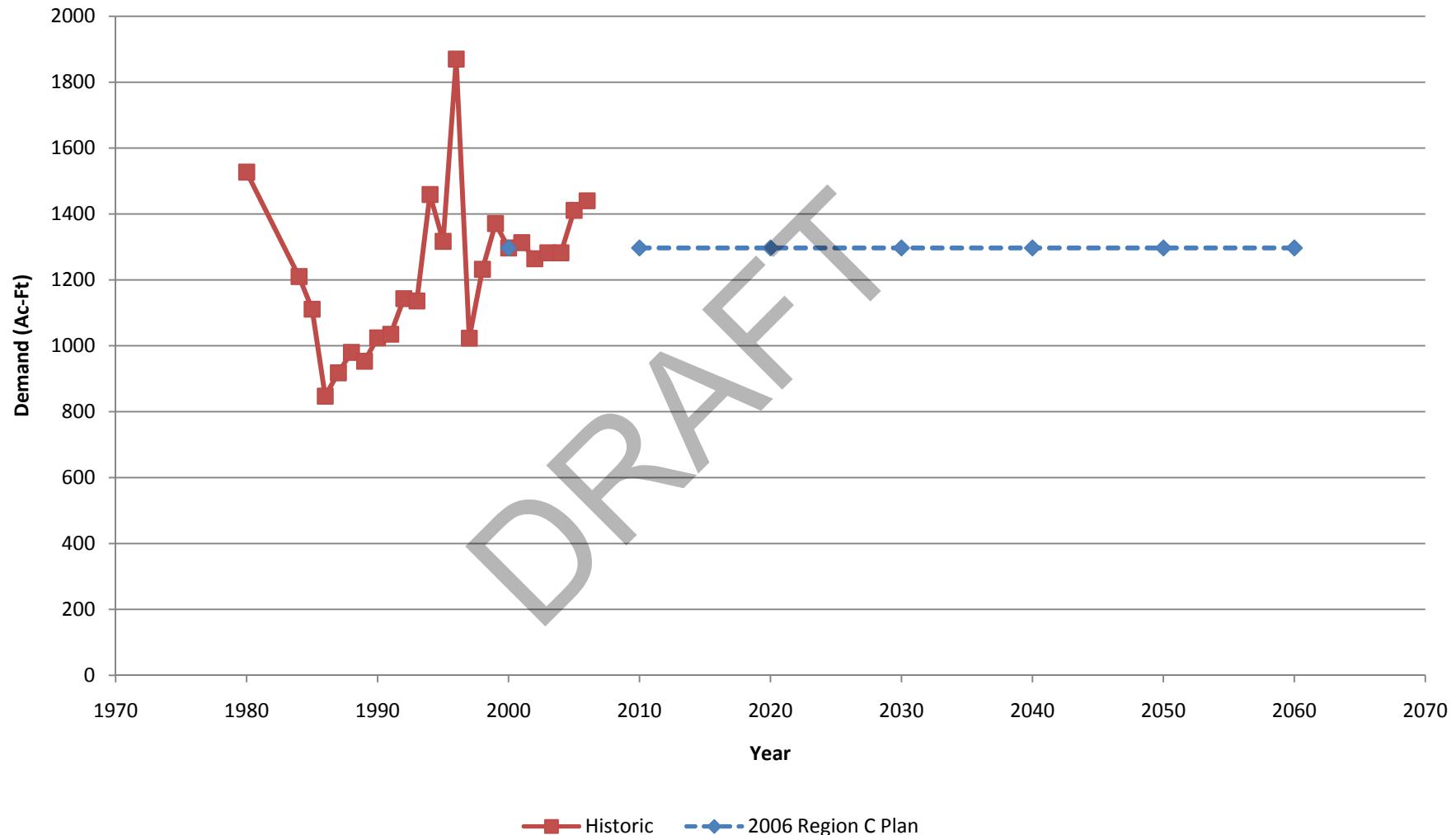
**Figure 6. Fannin County Livestock Demands**



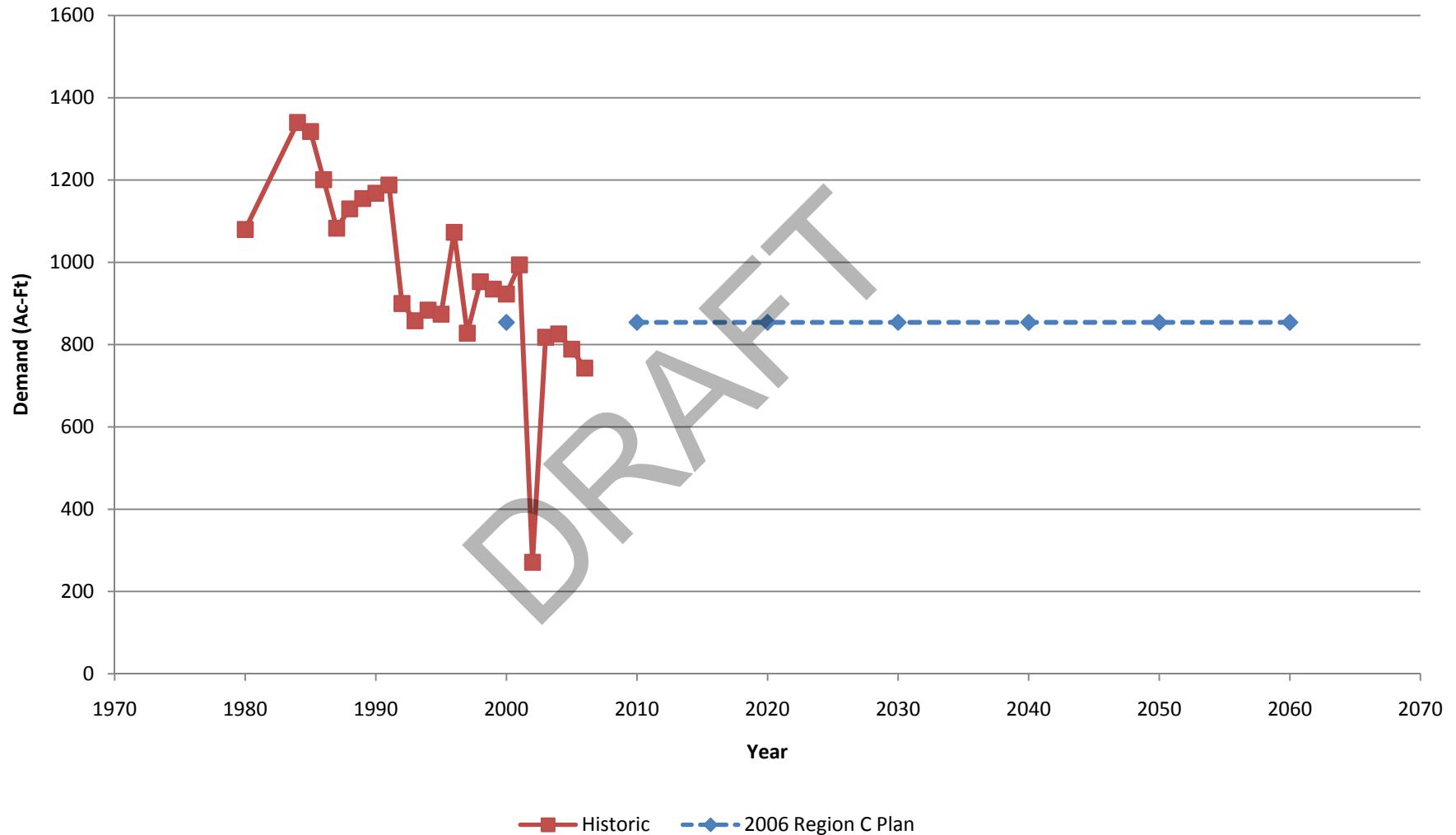
**Figure 7. Freestone County Livestock Demands**



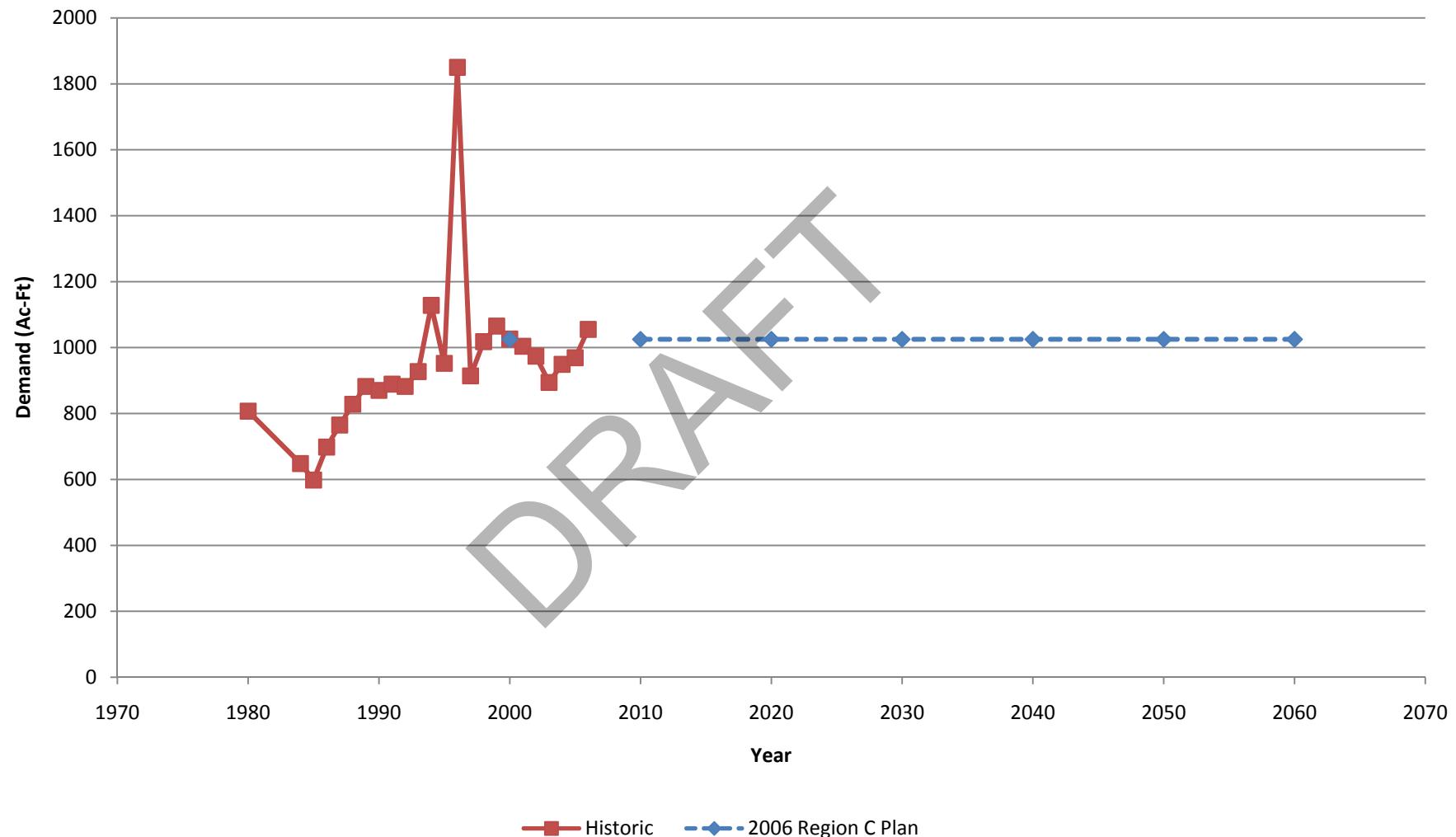
**Figure 8. Grayson County Livestock Demands**



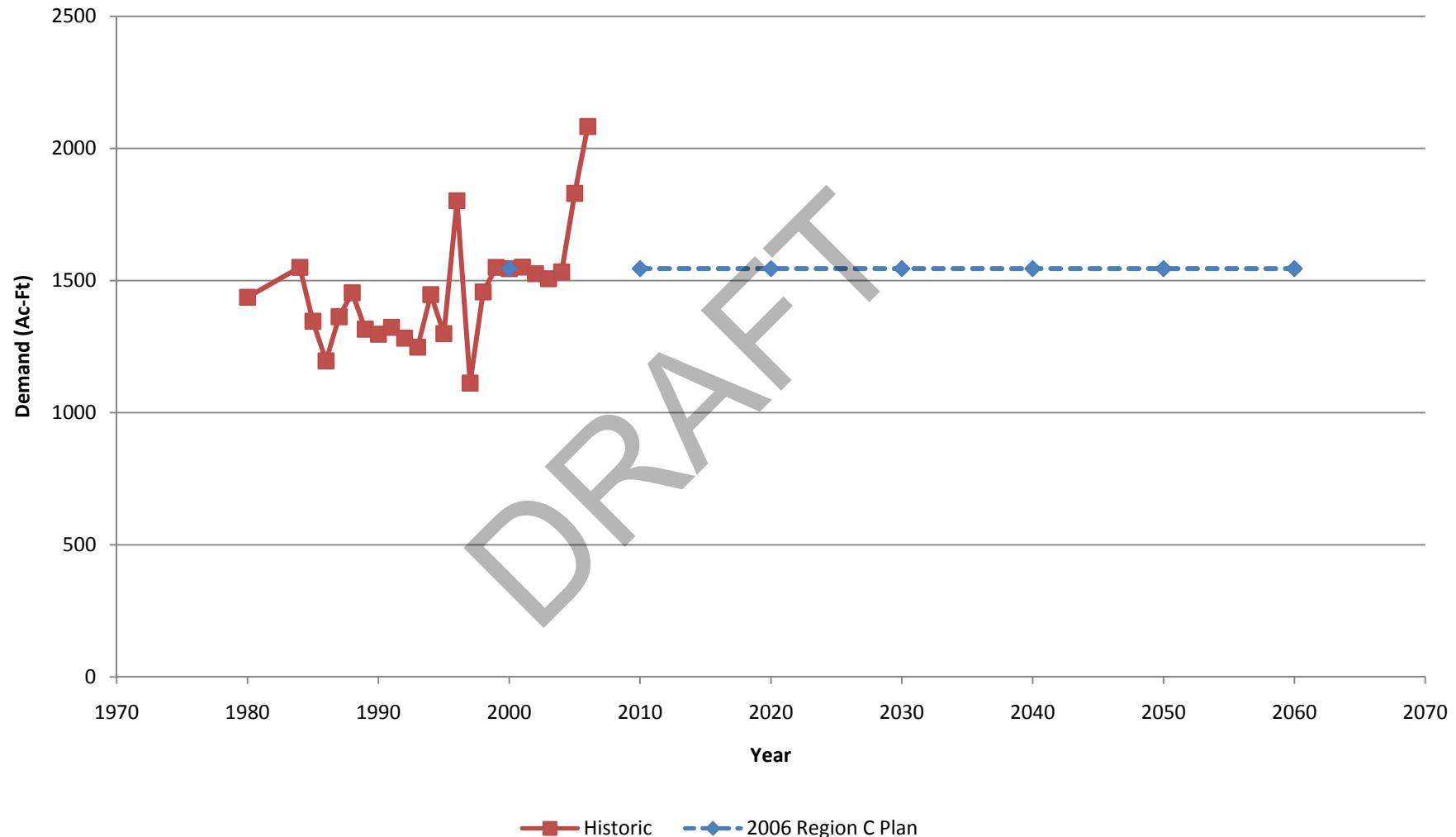
**Figure 9. Henderson County Livestock Demands**



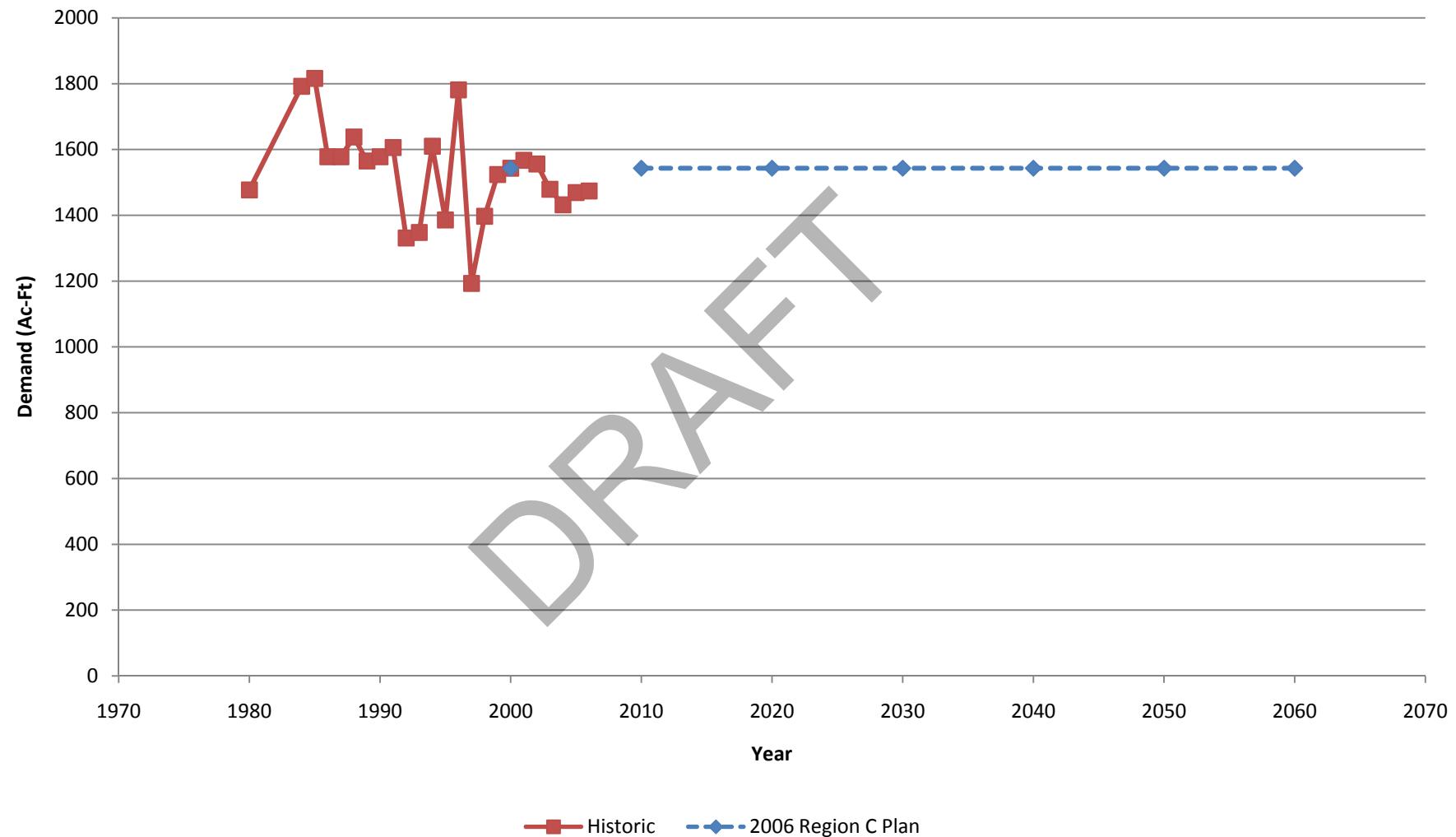
**Figure 10. Jack County Livestock Demands**



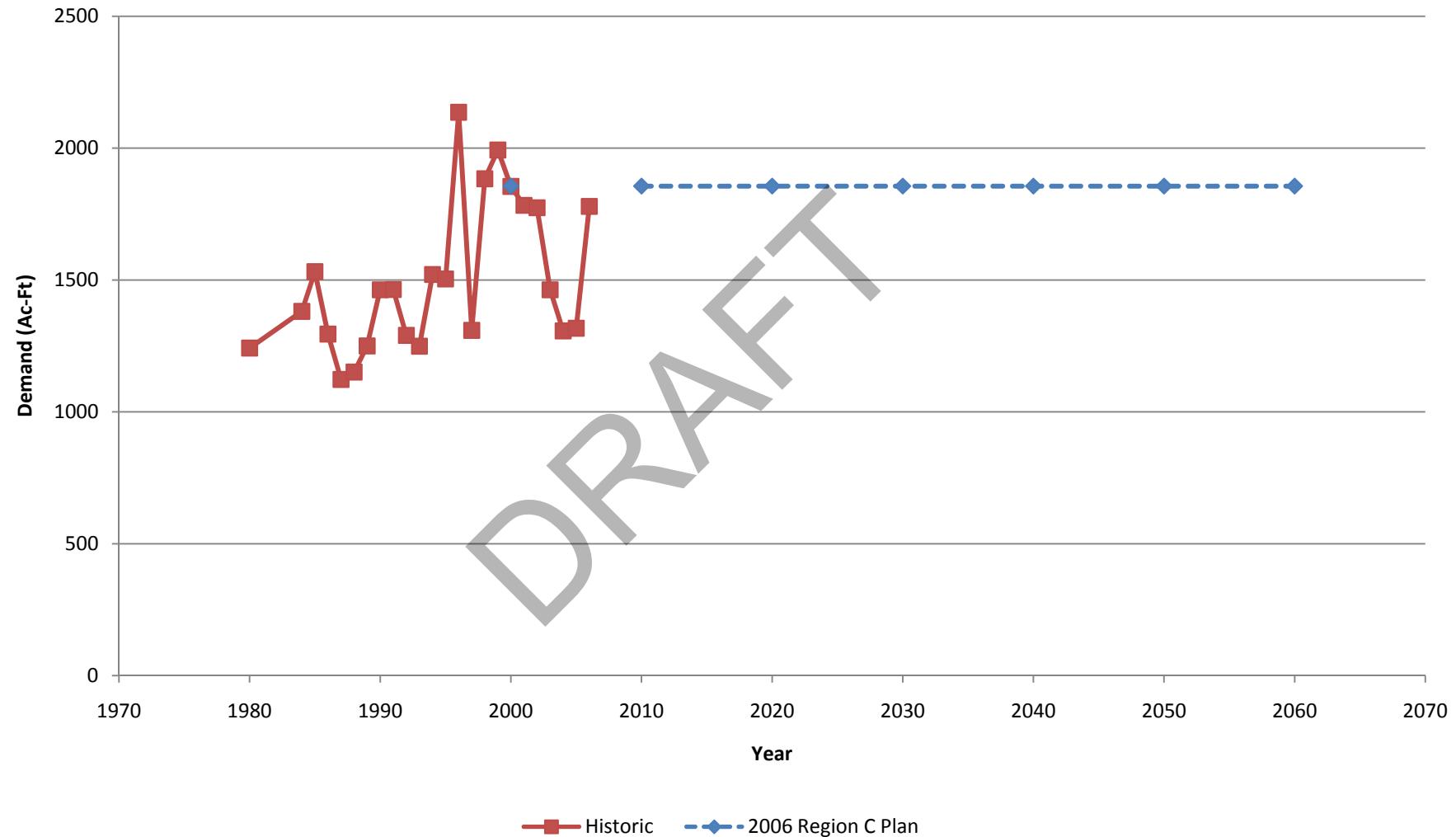
**Figure 11. Kaufman County Livestock Demands**



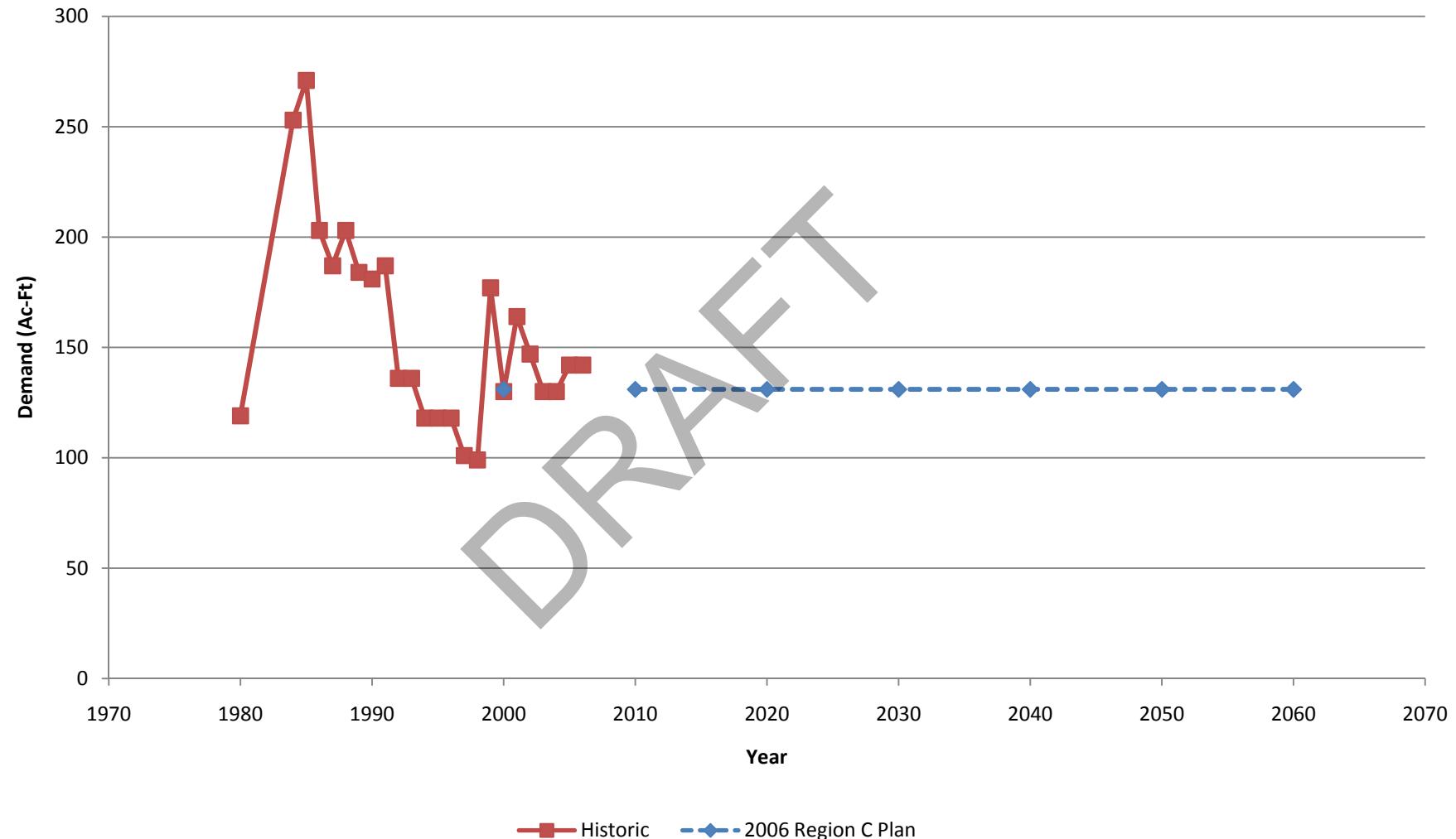
**Figure 12. Navarro County Livestock Demands**



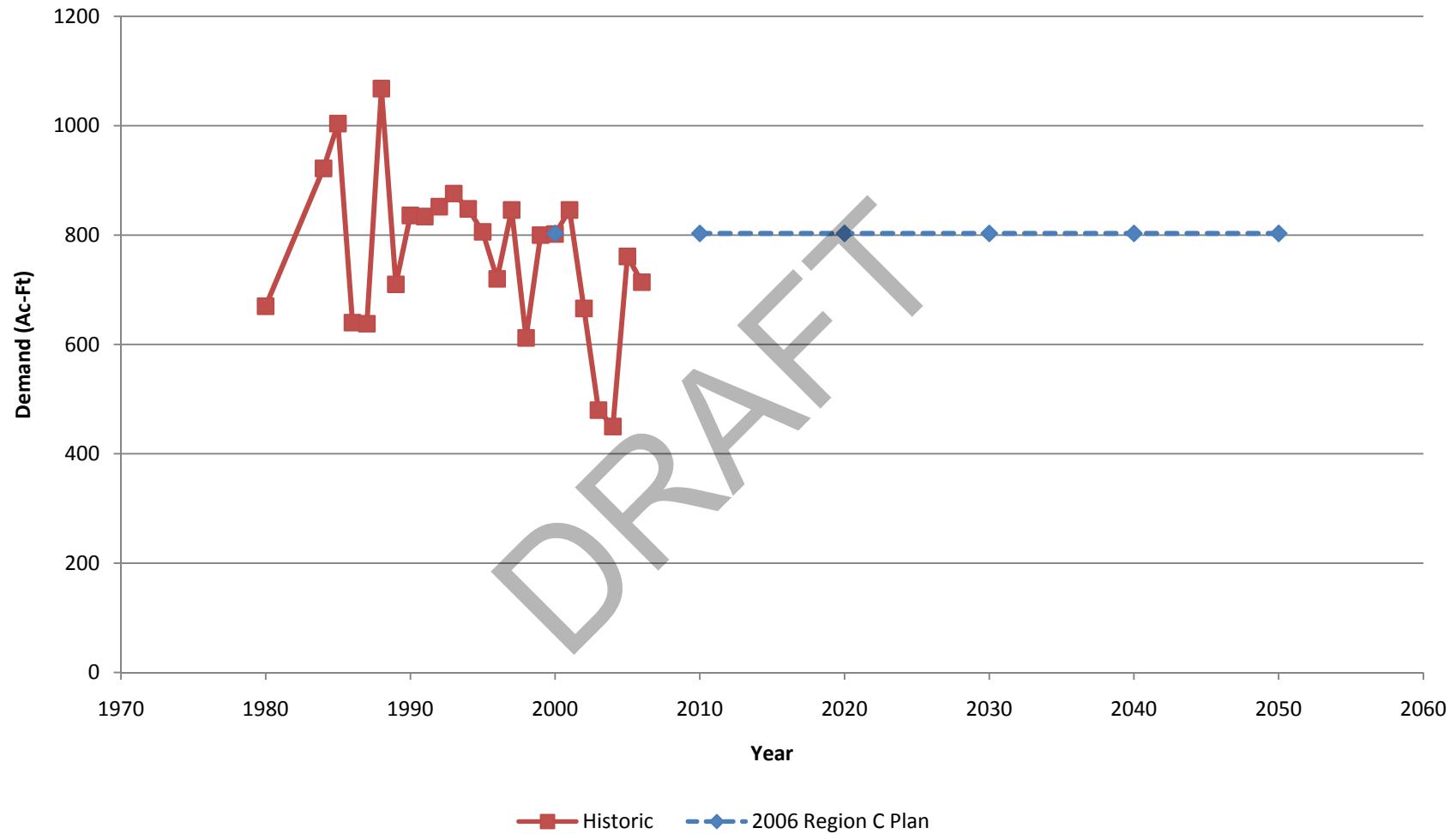
**Figure 13. Parker County Livestock Demands**



**Figure 14. Rockwall County Livestock Demands**



**Figure 15. Tarrant County Livestock Demands**



**Figure 16. Wise County Livestock Demands**

