As filed with the Securities and Exchange Commission on August 20, 2001

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

GENESEE & WYOMING INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 16-0984624 (I.R.S Employer Identification No.)

66 Field Point Road Greenwich, Connecticut 06830 (Address of Principal Executive Offices) (Zip Code)

Genesee & Wyoming Inc. Stock Option Plan for Outside Directors, as amended through July 1, 2001 (Full title of Plan)

Mortimer B. Fuller, III Chairman and Chief Executive Officer Genesee & Wyoming Inc. 66 Field Point Road Greenwich, Connecticut 06830 (Name and address of agent for service)

203-629-3722

(Telephone number, including area code, of agent for service)

Calculation of Registration Fee

Title of Plan	Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share(1)	Proposed Amount of maximum registration aggregate fee offering price(1)
Genesee & Wyoming Inc. Stock Option Plan for Outside Directors, as amended through July 1, 2001	Class A Common Stock, par value \$.01 per share	60,000	\$25.36	\$1,521,600 \$380.40

(1) Estimated in accordance with Rule 457(c), as of August 16, 2001, solely for the purpose of calculating the registration fee.

Pursuant to Rule 416, there are also being registered such additional shares of Common Stock as may become issuable pursuant to anti-dilution provisions of the Plan.

This Registration Statement on Form S-8 relates to an amendment to the Genesee & Wyoming Inc. Stock Option Plan for Outside Directors that increased the number of shares of Class A Common Stock, par value \$.01 per share (the "Common Stock"), to be issued thereunder by 40,000 shares, which shares were increased to 60,000 shares as the result of a 3-for-2 Common Stock split, in the form of a stock dividend, paid by the Registrant on June 15, 2001. The contents of the Registrant's Registration Statement on Form S-8 (File No. 333-09165) filed with the Securities and Exchange Commission on July 20, 1996, is hereby incorporated by reference pursuant to Instruction E to Form S-8. Also pursuant to Instruction E to Form S-8, the filing fee is being paid only with respect to the 60,000 shares of Common Stock not previously registered.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rochester, State of New York, on this 20th day of August, 2001.

GENESEE & WYOMING INC.

By: /s/ Alan R. Harris Alan R. Harris Senior Vice President and Chief Accounting Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities indicated and on the 20th day of August, 2001.

<u>Signature</u>	<u>Title</u>		
* Mortimer B. Fuller, III	Director, Chairman and Chief Executive Officer (Principal Executive Officer)		
* John C. Hellmann	Chief Financial Officer (Principal Financial Officer)		
/s/ Alan R. Harris Alan R. Harris	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)		

*	Director
C. Sean Day	
*	Director
James M. Fuller	
*	Director
Louis S. Fuller	
*	Director
T. Michael Long	
*	Director
Robert M. Melzer	
*	Director
John M. Randolph	
*	Director
Philip J. Ringo	
*	Director
M. Douglas Young	
*By: /s/ Alan R. Harris	

Alan R. Harris Attorney-in-Fact

INDEX TO EXHIBITS

- (4.1) Instruments defining the rights of security holders, including indentures
 - (a) Restated Certificate of Incorporation is incorporated herein by reference to Exhibit 3.1 to the Registrant's Report on Form 8-K dated December 7, 2000.
 - (b) Certificate of Designation of 4.0% Senior Redeemable Convertible Preferred Stock, Series A is incorporated herein by reference to Exhibit 3.2 to the Registrant's Report on Form 8-K dated December 7, 2000.
 - (c) By-laws are incorporated herein by reference to Exhibit 3.3 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-3972).
 - (d) Specimen stock certificate representing shares of Class A Common Stock is incorporated herein by reference to Exhibit 4.1 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-3972).
 - (e) Form of Class B Stockholders' Agreement dated as of May 20, 1996, among the Registrant, its executive officers and its Class B stockholders is incorporated herein by reference to Exhibit 4.2 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-3972).
 - (f) Promissory Note dated October 7, 1991 of Buffalo & Pittsburgh Railroad, Inc. in favor of CSX Transportation, Inc. is incorporated herein by reference to Exhibit 4.6 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-3972).
 - (g) First Amendment to Promissory Note dated as of March 19, 1999 between Buffalo & Pittsburgh Railroad, Inc. and CSX Transportation, Inc. is incorporated herein by reference to Exhibit 4.1 to the Registrant's Report on Form 10-K for the fiscal year ended December 31, 1998.
 - (h) Third Amended and Restated Revolving Credit and Term Loan Agreement dated as of August 17, 1999 among the Registrant, certain subsidiaries, BankBoston, N.A. and the banks named therein is incorporated herein by reference to Exhibit 4.1 to the Registrant's Report on Form 10-Q for the quarter ended September 30, 1999.
 - Stock Purchase Agreement by and between Genesee & Wyoming Inc. and The 1818 Fund III, L.P. dated October 19, 2000 is incorporated herein by reference to Exhibit 10.1 to the Registrant's Report on Form 8-K dated December 7, 2000.
 - (j) Registration Rights Agreement between Genesee & Wyoming Inc. and The 1818 Fund III, L.P. dated December 12, 2000 is incorporated herein by reference to Exhibit 10.2 to the Registrant's Report on Form 8-K dated December 7, 2000.

- (k) Letter Agreement between Genesee & Wyoming Inc., The 1818 Fund III, L.P. and Mortimer B. Fuller, III dated December 12, 2000 is incorporated herein by reference to Exhibit 10.3 to the Registrant's Report on Form 8-K dated December 7, 2000.
- *(5.1) Opinion of Harter, Secrest & Emery LLP
- *(23.1) Consent of Arthur Andersen LLP
- *(23.2) Consent of Harter, Secrest & Emery LLP (contained in Exhibit 5.1)
- *(24.1) Power of Attorney
- (99) Additional Exhibits
 - (a) Genesee & Wyoming Inc. Stock Option Plan for Outside Directors is incorporated herein by reference to Exhibit 10.2 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-3972).
 - (b) Amendment No. 1 to the Genesee & Wyoming Inc. Stock Option Plan for Outside Directors is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-K for the year ended December 31, 1997.
 - (c) Amendment No. 2 to the Genesee & Wyoming Inc. Stock Option Plan for Outside Directors is incorporated herein by reference to Exhibit 10.3 to the Registrant's Form 10-Q for the quarter ended June 30, 2000.
 - (d) Amendment No. 3 to the Genesee & Wyoming Inc. Stock Option Plan for Outside Directors is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q for the quarter ended June 30, 2001.
 - (e) Amendment No. 4 to the Genesee & Wyoming Inc. Stock Option Plan for Outside Directors is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q for the quarter ended June 30, 2001.

^{*} Exhibit filed with this Registration Statement