Summary: General Wiener vs. FLP

	General Wiener	Forward LP	Backward LP
Tap input	$\underline{x}[n]$	$\underline{u}[n-1]$	
Desired response	$d[n]$	$u[n]$	
(conj) Weight vector	$\underline{c} = \underline{a}^*$	$\underline{c}$	
Estimated sig	$\hat{d}[n]$	$\hat{d}[n] = \underline{c}^H \underline{u}[n-1]$	
Estimation error	$e[n]$	$f_M[n]$	
Correlation matrix	$\mathbf{R}_M$	$\mathbf{R}_M$	
Cross-corr vector	$\underline{p}$	$\underline{r}$	
MMSE	$J_{\min}$	P_M	
Normal Equation	$\mathbf{R}\underline{c} = \underline{p}$	$\mathbf{R}\underline{c} = \underline{r}$	
Augmented N.E.		$\mathbf{R}_{M+1}\underline{a}_M = \begin{bmatrix} P_M \\ \underline{0} \end{bmatrix}$	

(return)

Summary: General Wiener vs. FLP vs. BLP

	General Wiener	Forward LP	Backward LP
Tap input	$\underline{x}[n]$	$\underline{u}[n-1]$	$\underline{u}[n]$
Desired response	$d[n]$	$u[n]$	$u[n-M]$
(conj) Weight vector	$\underline{c} = \underline{a}^*$	$\underline{c}$	$\underline{g}$
Estimated sig	$\hat{d}[n]$	$\hat{d}[n] = \underline{c}^H \underline{u}[n-1]$	$\hat{d}[n] = \underline{g}^H \underline{u}[n]$
Estimation error	$e[n]$	$f_M[n]$	$b_M[n]$
Correlation matrix	$\mathbf{R}_M$	$\mathbf{R}_M$	$\mathbf{R}_M$
Cross-corr vector	$\underline{p}$	$\underline{r}$	$\underline{r}^{B^*}$
MMSE	$J_{\min}$	P_M	P_M
Normal Equation	$\mathbf{R}\underline{c} = \underline{p}$	$\mathbf{R}\underline{c} = \underline{r}$	$\mathbf{R}\underline{g} = \underline{r}^{B^*}$
Augmented N.E.		$\mathbf{R}_{M+1}\underline{a}_M = \begin{bmatrix} P_M \\ \underline{0} \end{bmatrix}$	$\mathbf{R}_{M+1}\underline{a}_M^{B^*} = \begin{bmatrix} \underline{0} \\ P_M \end{bmatrix}$